

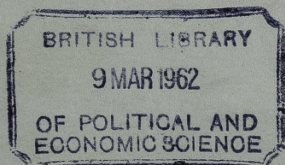
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GENERAL REGISTER OFFICE

THE  
REGISTRAR GENERAL'S  
STATISTICAL REVIEW  
OF  
ENGLAND AND WALES

FOR THE YEAR  
1959

PART III  
COMMENTARY



LONDON  
HER MAJESTY'S STATIONERY OFFICE  
PRICE 18s. 6d. NET

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## EXPLANATORY NOTES

### 1. Populations

The estimates of population appearing in this volume and described as "home" or "total" populations, have the following content:

*Home population*—the population, of all types, actually in England and Wales, distributed by area according to residence.

*Total population*—the home population plus members of H.M. Forces belonging to England and Wales and serving overseas but minus the Forces of other countries temporarily in England and Wales.

### 2. Numbering of tables

Of the tables referred to in this review, those numbered in Arabic numerals will be found in "Part I, Tables, Medical" and those lettered will be found in "Part II, Tables, Population" for the year in question, while those numbered in Roman numerals appear in this volume.

### 3. Standardised mortality comparison

The Comparative Mortality Index introduced in 1942 has since 1958 been replaced by a Standardised Mortality Ratio which shows the number of deaths registered in the year of experience as a percentage of those which would have been expected in that year had the sex/age mortality of a standard period (1950-1952) operated on the sex/age population of the year of experience.

These Standardised Mortality Ratios are shown in Tables XLIV, XLIX, LXXXIII, LXXXIV, LXXXIX, XCIII, XCVII and CIII of the present volume.

### 4. Indication of reliability

Rates given as 0 indicate that the actual rate is less than one half of a unit. A dash (—) in any column indicates that there were no events.

Rates based upon less than 20 events are distinguished by italic type as a warning to the user that the smallness of the experiences may affect their reliability as a measure of the underlying mortality.

#### Numbers

If  $d$  represents the deaths in an area and  $p$  the population in that area then, if  $d/p$  is small, the standard error (s.e.) of  $d$  is approximately  $\sqrt{d}$  assuming that the deaths are independent of one another. Clearly, the larger the number of deaths the smaller will be the proportionate variability. A deviation either way of twice the s.e. may be expected about once in 20 times. Using this criterion one might expect towns each averaging 20 deaths per year to yield in the same year numbers ranging between 11 and 29 without such differences having any statistical significance. Alternatively it could be said that if 20 deaths were recorded for a town, this number would have a 95 per cent confidence interval of approximately  $\pm 9$ , there being a 95 per cent chance that the underlying mortality is represented by a number of deaths within this interval.

If  $d$  is thought to be an extreme variation it would be more reliable to use as the standard error not  $\sqrt{d}$  but  $\sqrt{d'}$  where  $d'$  is the number of deaths expected if some standard rate (e.g. the national rate) were applied.

#### Rates

The appropriate standard error of a death rate when  $d$  represents the number of deaths and  $p$  the population is

$$\frac{\sqrt{d}}{p} \text{ or } \frac{m}{\sqrt{d}}$$

where  $m$  is the death rate. The difference between two local death rates  $m_1$  and  $m_2$  can only be regarded as significant if it amounts to more than twice the standard error of the difference, viz.

$$2\sqrt{\frac{m_1^2}{d_1} + \frac{m_2^2}{d_2}}$$

### Comparison of adjusted rates

Before comparisons are made, other known sources of variation (such as differences in the sex and age composition of the population) must be removed. If  $C$  is the local death Area Comparability Factor, then  $mC$  is to be compared with  $m'$ , the national death rate. The s.e. of  $mC$  is

$$\sqrt{\frac{mC}{p}}$$

and

$$mC \pm 2\sqrt{\frac{mC}{p}}$$

is to be compared with  $m'$ . As already indicated,  $m'$  can be used instead of  $m$  in the calculation of the s.e.;  $m'$  has the advantage of itself having a small sampling error.

### 5. Definition of areas

**London A.C.** = administrative county of London which consists of the City of London (including the Inner and Middle Temples) and the metropolitan boroughs.

**C.B.** = county borough; **M.B.** = municipal borough; **Met.B.** = metropolitan borough; **U.D.** = urban district; **R.D.** = rural district.

### 6. Standard regions

The constitution of the standard regions of England and Wales used in this volume is as follows:

REGION I <i>Northern</i>	REGION IV <i>Eastern</i>	REGION VI <i>Southern</i>	Wales II (remainder)
Cumberland Durham Northumberland Westmorland Yorkshire, North Riding	Bedfordshire Cambridgeshire Ely, Isle of Essex, Part of <sup>2</sup> Hertfordshire, Part of <sup>3</sup> Huntingdonshire Norfolk Suffolk, East Suffolk, West	Berkshire Buckinghamshire *Dorset, Part of <sup>6</sup> *Hampshire Oxfordshire Wight, Isle of	Anglesey Caernarvonshire Cardiganshire Denbighshire Flintshire Merionethshire Montgomeryshire Pembrokeshire Radnorshire
REGION II <i>East and West Ridings</i>	REGION V <i>London and South Eastern</i>	REGION VII <i>South Western</i>	REGION IX <i>Midland</i>
Yorkshire, East Riding Yorkshire, West Riding	Essex, Part of <sup>4</sup> Hertfordshire, Part of <sup>5</sup> Kent London Admin. County Middlesex Surrey Sussex, East Sussex, West	Cornwall Devon *Dorset, Part of <sup>7</sup> Gloucestershire Somerset Wiltshire	Herefordshire Shropshire Staffordshire Warwickshire Worcestershire
REGION III <i>North Midland</i>		REGION VIII <i>Wales I (South East)</i>	REGION X <i>North Western</i>
Derbyshire, Part of <sup>1</sup> Leicestershire Lincolnshire— Parts of Holland Parts of Kesteven Parts of Lindsey Northamptonshire Nottinghamshire Peterborough, Soke of Rutland		Brecknockshire Carmarthenshire Glamorganshire Monmouthshire	Cheshire Derbyshire, Part of <sup>8</sup> Lancashire

- All except Buxton M.B., Glossop M.B., New Mills U.D., Whaley Bridge U.D. and Chapel en le Frith R.D.
- All except East Ham C.B., West Ham C.B., Chingford M.B., Wanstead and Woodford M.B., Leyton M.B., Walthamstow M.B., Ilford M.B., Barking M.B., Dagenham M.B., Waltham Holy Cross U.D. and Chigwell U.D.
- All except Barnet U.D., Bushey U.D., Cheshunt U.D., East Barnet U.D. and Elstree R.D.
- All areas stated in 2 above.
- All areas stated in 3 above.
- Poole M.B. only.
- All areas except Poole M.B.
- All areas stated in 1 above.

\*On 1st April, 1959, the administrative county of Southampton was renamed Hampshire.

The constitution of the standard regions has been changed by the transfer of Dorset (except Poole M.B.) from the Southern Region to the South Western Region.



## 7. Conurbations

The conurbation areas used in this volume are those which were agreed in 1950, under the aegis of the Interdepartmental Committee on Social and Economic Research and the Central Statistical Office, for the presentation of official statistics generally.\* They each consist of an aggregation of entire local authority areas and are constituted as follows:

Tyneside		Northumberland	
<i>Durham</i>			
Gateshead C.B.	Felling U.D.	Newcastle upon Tyne C.B.	Longbenton U.D.
South Shields C.B.	Hebburn U.D.	Tynemouth C.B.	Newburn U.D.
	Jarrow M.B.		Wallsend M.B.
	Whickham U.D.	Gosforth U.D.	Whitley Bay M.B.
West Yorkshire			
<i>Yorkshire, West Riding</i>			
Bradford C.B.	Aireborough U.D.	Heckmondwike U.D.	Ossett M.B.
Dewsbury C.B.	Baildon U.D.	Holmfirth U.D.	Pudsey M.B.
Halifax C.B.	Batley M.B.	Horsbury U.D.	Queensbury and Shelf U.D.
Huddersfield C.B.	Bingley U.D.	Horsforth U.D.	Ripponden U.D.
Leeds C.B.	Brighouse M.B.	Keighley M.B.	Rothwell U.D.
Wakefield C.B.			
	Colne Valley U.D.	Kirkburton U.D.	Shipley U.D.
	Denby Dale U.D.	Meltham U.D.	Sowerby Bridge U.D.
	Denholme U.D.	Mirfield U.D.	Spenborough M.B.
	Elland U.D.	Morley M.B.	Stanley U.D.
South East Lancashire			
<i>Cheshire</i>	<i>Lancashire</i>		
Stockport C.B.	Bolton C.B.	Horwich U.D.	Urmston U.D.
Alderley Edge U.D.	Bury C.B.	Irlam U.D.	Wardle U.D.
Altrincham M.B.	Manchester C.B.	Kearsley U.D.	Westthroughton U.D.
Bowdon U.D.	Oldham C.B.	Lees U.D.	Whitefield U.D.
Bredbury and Romiley U.D.	Rochdale C.B.	Littleborough U.D.	Whitworth U.D.
Cheadle and Gatley U.D.	Salford C.B.		Worsley U.D.
Dukinfield M.B.		Little Lever U.D.	
Hale U.D.	Ashton-under-Lyne M.B.	Middleton M.B.	
Hazel Grove and Bramhall U.D.	Audenshaw U.D.	Milnrow U.D.	
Hyde M.B.	Chadderton U.D.	Mossley M.B.	
Marple U.D.	Crompton U.D.	Prestwich M.B.	
Sale M.B.	Denton U.D.		
Stalybridge M.B.		Radcliffe M.B.	
Wilmslow U.D.	Droylsden U.D.	Royton U.D.	
Disley R.D.	Eccles M.B.	Stretford M.B.	
	Failsworth U.D.	Swinton and Pendlebury M.B.	
	Farnworth M.B.	Tottington U.D.	
	Heywood M.B.		
Merseyside			
<i>Cheshire</i>	<i>Lancashire</i>		
Birkenhead C.B.	Ellesmere Port M.B.	Bootle C.B.	Huyton-with-Roby U.D.
Wallasey C.B.	Hoyle U.D.	Liverpool C.B.	Litherland U.D.
Bebington M.B.	Neston U.D.	Crosby M.B.	
	Wirral U.D.		
West Midlands			
<i>Staffordshire</i>	<i>Warwickshire</i>	<i>Worcestershire</i>	
Smethwick C.B.	Darlaston U.D.	Birmingham C.B.	Dudley C.B.
Walsall C.B.	Rowley Regis M.B.		
West Bromwich C.B.	Sedgley U.D.	Solihull M.B.	Halesowen M.B.
Wolverhampton C.B.	Tettenhall U.D.	Sutton Coldfield M.B.	Oldbury M.B.
	Tipton M.B.		Stourbridge M.B.
Aldridge U.D.			
Amblecote U.D.	Wednesbury M.B.		
Bilston M.B.	Wednesfield U.D.		
Brierley Hill U.D.	Willenhall U.D.		
Coseley U.D.			

\*See *Census 1951, England and Wales, Preliminary Report*, page xxii, H.M.S.O., price 5s. 0d. net; also *Census 1951, England and Wales, Report on Greater London and Five Other Conurbations*, page xv, H.M.S.O., price £5 5s. 0d. net.

## Greater London

<i>London</i> (whole county)	<i>Middlesex</i> (whole county)	<i>Surrey</i>	<i>Kent</i>	<i>Essex</i>
			Beckenham M.B.	East Ham C.B.
			Bexley M.B.	West Ham C.B.
			Bromley M.B.	
			Chislehurst and Sidcup U.D.	Barking M.B.
Croydon C.B.	Kingston-upon-Thames M.B.		Crayford U.D.	Chigwell U.D.
Banstead U.D.	Malden and Coombe M.B.		Erith M.B.	Chingford M.B.
Barnes M.B.			Orpington U.D.	Dagenham M.B.
Beddington and Wallington M.B.	Merton and Morden U.D.		Penge U.D.	Ilford M.B.
Carshalton U.D.	Mitcham M.B.			
			<i>Hertfordshire</i>	Leyton M.B.
Coulsdon and Purley U.D.	Richmond M.B.		Barnet U.D.	Waltham Holy Cross U.D.
Epsom and Ewell M.B.	Surbiton M.B.		Bushey U.D.	Walthamstow M.B.
Esher U.D.	Sutton and Cheam M.B.		Cheshunt U.D.	Wanstead and Woodford M.B.
	Wimbledon M.B.		East Barnet U.D.	
			Elstree R.D.	

## 8. Urban and rural aggregates

Urban and rural aggregates relate to groups of local authority areas by type (all those within conurbations, urban areas, rural districts) and, in the case of urban areas, by size of enumerated population at the 1951 Census. "Urban areas" include boroughs and urban districts as defined under the Local Government Acts, and rural districts are also as defined by those Acts.

## 9. Assignment of vital statistics by area

In all tables births and stillbirths are classified according to the area of usual residence of the parents (or mother) and deaths to the area of usual residence of the deceased. Accommodation provided under Parts III and IV of the National Assistance Act, 1948, is regarded as the place of residence of persons dying there. Before 1st January 1958 chronic sick and psychiatric hospitals were similarly treated for this purpose but from that date the method of classification was modified, the main change being that a death in such a hospital is now assigned to the area of occurrence only if the deceased had been there six months or more. If the deceased had been there less than six months the death is transferred to the area of previous usual residence.

## 10. General

See also the Explanatory Notes to the Tables volumes, Parts I and II.

## CORRIGENDA

### Statistical Review 1958, Part III, Commentary

Page 187 Table CV  
 "N.H.S. hospital" line should read 444,749; 12,842; 457,591;  
 60·5; (60·6); 28·1; (28·8)  
 "Other" line should read 17,443; 261; 17,704; 2·3; (2·3); 14·7;  
 (15·0)

Page 188 Table CVI  
 For columns headed "N.H.S. hospital" and "Other" substitute the  
 following:

Age-group	Parity of mother							
	0		1-3		4 and over		Total	
	N.H.S. hospital	Other	N.H.S. hospital	Other	N.H.S. hospital	Other	N.H.S. hospital	Other
All ages ...	241,133	8,717	178,617	8,376	24,999	350	444,749	17,443
Under 25 ...	134,237	6,400	41,977	3,600	544	22	176,758	10,022
25- ...	93,016	2,148	106,302	4,356	11,923	217	211,241	6,721
35 and over	13,392	138	30,091	405	12,485	111	55,968	654
Not stated	488	31	247	15	47	—	782	46

Page 189 Table CVII  
 Parity 0, "N.H.S. hospital" col. should read 6,431; 3,070; 2,688;  
 613; 60; and "Other" col. should read 169; 83; 54; 4; 28  
 Parity 4 and over, "N.H.S. hospital" col. should read 1,261; 16;  
 515; 717; 13; and "Other" col. should read 12; —; 7; 5; —  
 Parity Total, "N.H.S. hospital" col. should read 12,842; 3,920;  
 6,220; 2,619; 83; and "Other" col. should read 261; 111;  
 106; 16; 28

Page 191 Table CIX  
 All ages, Parity 4 and over, "Other" col. for 35 read 33  
 Under 25, Parity 1-3, "N.H.S. hospital" col. for 20 read 19  
 25—, Parity 4 and over, "Other" col. for 35 read 31  
 35 and over, Parity 0, "Other" col. for 34 read 28; Parity 1-3,  
 "Other" col. for 16 read 17; Parity 4 and over, "Other" col.  
 for 42 read 43

Page 192 Table CX

ENGLAND AND WALES, Parity 4 and over, "Other" col. for  
 35 read 33

Midland, Parity 0, "Other" col. for 17 read 18  
 Parity 1-3 "N.H.S. hospital" col. for 33 read 32  
 "Other" col. for 9 read 10  
 Parity 4 and over, "Other" col. for 60 read 49

## INTRODUCTION

This Commentary, the third part of the *Registrar General's Statistical Review* for 1959, continues a change in the treatment of the subject of mortality. In place of the frequently repetitive survey of an extensive range of causes of death there will be, as on this occasion, a brief review of the salient features of general mortality followed by notes on one or two subjects selected either because they are topical or because they are of general interest. Mortality according to marital status is one of the matters chosen for special notice in this Review; the other is a current assessment of deaths from congenital malformations. Comparisons of changes and trends in the wider range of causes can still be made from the usual serial tables.

For the rest, the Commentary follows a familiar pattern. Population, marriages, divorces, widowhood and births are analysed before the mortality chapters, which are followed by comment on a miscellany of medical statistics, a report on the work of the Advisory Committee on Medical Nomenclature and Statistics and a summary of the vital statistics of Great Britain and Ireland. A review of international co-operation in population and health statistics in 1959 precedes the customary note on information derived from the Registration Service, including particulars of the number of searches made by the public in the indexes of registered marriages, births and deaths at Somerset House and of the number of certificates issued. The Commentary concludes with statistics of work on the National Health Service Central Register and an analysis of electors on the parliamentary and local government registers.

General Register Office,  
Somerset House,  
London, W.C.2.

October 1961.

## POPULATION

It is estimated that at mid-1959 the *home* population of England and Wales was 45,386,000, the *civilian* population 45,007,000 and the *total* population 45,504,000.

As defined in Explanatory Note 1 on page xii, the *home* estimate comprises all persons actually present in the country, civilian and military, and of whatever nationality. It is an estimate constructed from the last Census with allowance for births, deaths, migration into and out of the country and variation in the disposition of the Armed Forces, since the Census was taken. No adjustment is made, however, for the purely temporary seasonal net increase in visitors to this country in the summer months. For internal purposes the home population is the most important of the three estimates given. It serves as the control figure for the local population estimates on which Exchequer grants to local authorities are based and as a basis for the calculation of birth and death rates and other vital statistics. The term *civilian* population is self-explanatory—it is the home figure excluding its Armed Forces content.

Explanatory Note 1 defines our *total* population figure as the home population *plus* members of H.M. Forces serving overseas who are drawn from England and Wales, but *minus* the Forces of other countries temporarily stationed here.

It is easy enough to define the population of a country as the total number of its inhabitants; but there is no single definition of an inhabitant universally acceptable for all statistical purposes. There is a convention that either a *de facto* (or actual) figure or a *de jure* (by right) figure may be given, or both. But apart from the difficulty in making a choice between them which has faced those countries inexperienced in conducting a census, and in spite of special circumstances which may complicate even a true *de facto* count (such as the presence of jungle tribes, aborigines, nomadic groups, pockets of officially unrecognised displaced persons, etc. in a country), the United Nations Population Commission has found so confused and complicated a picture of actual theory and practice that, in the interest of comparability between the statistics of different nations, it recommended the production from each national census around 1950 of total figures on a uniform modified *de facto* basis, whatever other figures were also produced. This recommendation of an "international conventional total" population figure has been repeated for the 1960 round of censuses.

The 1959 United Nations Demographic Yearbook defines the "international conventional total" as "the total number of persons present in the country at the time of the census, excluding foreign military, naval and diplomatic personnel and their families located in the country but including military, naval and diplomatic personnel of the country and their families located abroad and merchant seamen resident in the country but at sea at the time".

The *home* population of England and Wales is the simple *de facto* population count. The *total* population of England and Wales is a by-product of national requirements; and its development, though not its publication in its present

form, long antedates the United Nations discussions and recommendations. In fact, however, it sufficiently approximates to the recommended "international conventional total" to be identifiable with it for the purposes of international comparability.

The inclusion of merchant seamen at sea is recommended by the U.N. Population Commission, but is not mentioned in Explanatory Note 1. They are excluded from all three of the published estimates for England and Wales. Similarly, the categories referred to above as recommended for exclusion, but which are not mentioned in Explanatory Note 1, are included by us. On the basis of past experience, however, it is possible to assume that these contrasting groups are in rough balance.

Table I. Estimated population mid-1951 to mid-1959, England and Wales  
(Figures in thousands)

	Total			Home			Civilian		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1951	44,007	21,233	22,774	43,815	21,044	22,771	43,284	20,530	22,754
1952	44,166	21,320	22,846	43,955	21,110	22,845	43,402	20,576	22,826
1953	44,301	21,397	22,904	44,109	21,206	22,903	43,541	20,658	22,883
1954	44,480	21,492	22,988	44,274	21,288	22,986	43,742	20,774	22,968
1955	44,623	21,569	23,054	44,441	21,389	23,052	43,916	20,879	23,037
1956	44,821	21,669	23,152	44,667	21,517	23,150	44,151	21,013	23,138
1957	45,043	21,782	23,261	44,907	21,648	23,259	44,425	21,177	23,248
1958	45,244	21,877	23,367	45,109	21,744	23,365	44,701	21,346	23,355
1959	45,504	22,002	23,502	45,386	21,885	23,501	45,007	21,517	23,490

From Table I above it will be seen that at no time during the period covered would the use of the total population involve the addition of as much as half of one per cent to the home population, while recently the addition required represents only about a quarter of one per cent of the home population.

On the basis of the *de facto* or home population, the number of persons in England and Wales increased between 1951 and 1959 by 1,571,000 or nearly 3.6 per cent.

The annual increases average 196,000 ranging from 140,000 to 277,000. If we compare this eight-year period with that from mid-1931 to mid-1939, we find many similarities. With a smaller starting figure, there was then an increase of about 1,500,000 (slightly under 3.7 per cent) in the population of England and Wales. The annual increases averaged 184,000, ranging from 117,000 to 245,000. In the period from mid-1921 to mid-1929, the overall increase had been nearly 1,700,000 (or 4.4 per cent), with annual increases averaging 208,000 and ranging from 117,000 to 346,000. In general, apart from the expected short term fluctuations, there was in the nineteen fifties no significant departure from the pattern of population change persisting since about 1911.

During the Victorian and Edwardian periods, the population of England and Wales increased by more than 20 million people, having doubled itself in a little more than half a century. From some 15 millions in 1837, it rose to over 32 millions by the end of the nineteenth century and was nearly 36 millions

by 1910. This represented an average annual increase of some 288,000 spread over the 73 years; but over the last forty of them the annual increments had persisted at about 300,000 and from the eighteen nineties an annual rate of around 350,000 was maintained. Since the 1911 Census the population has risen from 36 millions to an estimated 45.4 millions at mid-1959. Looking back, we can fairly describe the last fifty years as the period when a previously accelerating rate of population increase, which had been adding 350,000 and more persons a year to the population of England and Wales, was quite rapidly and dramatically replaced by annual increases for the most part well below 200,000.

The most important element in the annual population increment is the number of births occurring in the year, and the change in the pace of population growth reflected a change in the flow of births. The yearly averages have been (in thousands):

1841—50	549	1901—10	930
1851—60	647	1911—20	810
1861—70	750	1921—30	713
1871—80	859	1931—40	606
1881—90	889	1941—50	725
1891—1900	916		

In fact the decline in births began soon after the end of the nineteenth century and rapidly gathered momentum. It was not arrested until the nineteen thirties. In 1933 there were as few as 580,000 live births. A slow rise brought the annual figure up to 621,000 in 1938. After the 1939-45 War there was (as there had been after the 1914-18 War) a sharp upward fluctuation in births, mainly due to "postponed births". After 1950 the flow seemed to have settled down to some 670,000 or so births a year. But in 1955 the flow was accelerated—700,000 in 1956, 723,000 in 1957, 741,000 in 1958, 749,000 in 1959. As a result the population increments since mid-1955 have been larger also—226,000 in 1955-56, 240,000 in 1956-57, 202,000 in 1957-58 and 277,000 in 1958-59.

**Table II. Natural increase of the population mid-1951 to mid-1959, England and Wales**

Year ended 30th June	Births			Deaths			Natural increase		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1952	669,195	343,708	325,487	484,136	250,310	233,826	185,059	93,398	91,661
1953	679,757	349,569	330,188	521,161	269,141	252,020	158,596	80,428	78,168
1954	680,794	349,788	331,006	487,860	252,565	235,295	192,934	97,223	95,711
1955	665,190	342,175	323,015	524,446	269,795	254,651	140,744	72,380	68,364
1956	687,214	354,082	333,132	516,340	266,001	250,339	170,874	88,081	82,793
1957	709,658	364,569	345,089	483,659	248,948	234,711	225,999	115,621	110,378
1958	732,751	377,142	355,609	549,955	284,054	265,901	182,796	93,088	89,708
1959	749,059	385,391	363,668	536,131	274,680	261,451	212,928	110,711	102,217

The Table II above sets out the figures making up the natural increase (excess of births over deaths) from mid-1951 to mid-1959. The "bulge" years of 1946 and 1947 (there were 821,000 and 881,000 births respectively in these two calendar years) were followed by a steady decline to a figure still higher than that persisting in the nineteen thirties. As already indicated births have increased in number since 1955 and in mid-year to mid-year terms reached 733,000 in 1957-58 and 749,000 in 1958-59.

The lowest year for births in the series in Table II was the year of least natural increase; but the year of greatest natural increase was not 1958-59 (the highest for births), but 1956-57. Deaths fluctuate from year to year independently of the movement in births, reflecting the irregular incidence of epidemics of influenza and similar events. In the eight years shown in Table II the annual deaths fluctuated between 484 and 550 thousand. In the period since mid-1951 the annual natural increase has only twice exceeded 200,000—the average during the 1951-59 being 184,000 (i.e. an average of 697,000 births offset by 513,000 deaths).

The other factors in population change are conveniently summarised into a simple net figure of migration; but what is here being measured is the balance between two opposing movements of a complex character. Table III below gives not only the final balance but also two separate constituents. It is necessary to explain the meaning of "migration" in this context. For the sake of greater comparability, international conventional use distinguishes between the long term or "permanent" migrant (a person whose movement to or from a country is expected to persist for at least one year) and the "short term migrant" or temporary visitor. For the estimation of population growth it is necessary to measure all long term and some short term migration. A *de facto* Census count will include visitors to a country and exclude residents who are away from it at the time. The next Census will reflect not only the natural change and long term migration to and from the country in the intervening period; but it will also cover any change in the difference between the number of temporary visitors to this country and the number of residents of England and Wales who are temporarily abroad. Intervening estimates attempt a similar assessment of such changes. To estimate the relatively small change in the "visitor" pool from the enormous passenger movement across the boundaries of England and Wales is a matter of some difficulty.

**Table III. Migration, mid-1951 to mid-1959, to and from England and Wales**  
(Figures in thousands)

Year ended 30th June	Net overseas migration			Net migration within United Kingdom			Total net migration		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1952	- 45*	- 17	- 28	+ 19	+ 11	+ 8	- 26	- 6	- 20
1953	- 42	- 15	- 27	+ 18	+ 11	+ 7	- 24	- 4	- 20
1954	- 30	- 11	- 19	+ 13	+ 8	+ 5	- 17	- 3	- 14
1955	- 15	- 6	- 9	+ 20	+ 12	+ 8	+ 5	+ 6	- 1
1956	—	- 2	+ 2	+ 25	+ 13	+ 12	+ 25	+ 11	+ 14
1957	- 20	- 13	- 7	+ 20	+ 12	+ 8	—	- 1	+ 1
1958	- 5	- 11	+ 6	+ 19	+ 11	+ 8	+ 14	—	+ 14
1959	+ 30	+ 4	+ 26	+ 18	+ 11	+ 7	+ 48	+ 15	+ 33

\*Including Allied Forces discharged between mid-1951 and mid-1952.

Table III distinguishes between net migration between England and Wales and the rest of the United Kingdom and net movement between this country and countries outside the United Kingdom. The first is an acknowledgement that in many respects the United Kingdom is a single entity and that this

element in the migration balance is a movement much more akin to that between one region of the country and another than, say, emigration from Italy to Wales or from London to Brazil. The two elements in the table constitute a two-way traffic of variable size but resulting since 1955 in a small net annual increase to the population of England and Wales.

One established element in the migration balance is the net annual increase from the Irish Republic. The growth of industrial development in the Republic might have been expected to curtail the availability of Irish immigrant workers; but in fact the inward flow of workers has increased in recent years. There is, however, much movement to and fro and some difficulty in assessing the resultant net annual addition to the population of this country. It probably amounts to over 20,000. There is also a net inflow of about 20,000 from Scotland and Northern Ireland.

The total migration balance apart from that from Scotland or Ireland is the difference between two complex groupings. One includes English and Welsh emigrants beyond the United Kingdom and the Irish Republic, any former Commonwealth or alien immigrants here who return home or move on to another country, and the change in the level of residents in this country temporarily away from it. The other and contrasted grouping includes Commonwealth and alien immigrants to this country, former emigrants returning to England and Wales and the change in the level of overseas visitors here (including, for example, U.S. Forces stationed here and their dependants).

Traditionally the first grouping has usually exceeded the second by more than net immigration here from the Irish Republic and net movement into England and Wales from the rest of the United Kingdom. Recent figures indicate that for the present the trend has been reversed; immigration from overseas has been in excess of emigration.

The warning about individual annual figures given in previous issues of this volume needs to be repeated. Net migration overseas (and this excludes Northern Ireland but includes the Irish Republic) is the difference between two large opposing totals of roughly the same order of size (something under 300,000). A relatively small change in either total can therefore produce a relatively large variation in the balance. These opposing totals are made up in part of firm figures, in part of estimates on incomplete data and in part of estimates largely relying on subjective judgement.

Table IV. Population changes mid-1951 to mid-1959, England and Wales  
(Figures in thousands)

Year ended 30th June	Population at beginning as corrected			Natural increase as estimated			Migration as estimated			Population at end as estimated and published		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1952	44,007	21,233	22,774	185	93	92	- 26	- 6	- 20	44,166	21,320	22,846
1953	44,166	21,320	22,846	159	81	78	- 24	- 4	- 20	44,301	21,397	22,904
1954	44,301	21,397	22,904	196	98	98	- 17	- 3	- 14	44,480	21,492	22,988
1955	44,477	21,491	22,986	141	72	69	+ 5	+ 6	- 1	44,623	21,569	23,054
1956	44,623	21,569	23,054	173	89	84	+ 25	+ 11	+ 14	44,821	21,669	23,152
1957	44,819	21,668	23,151	224	115	109	-	- 1	+ 1	45,043	21,782	23,261
1958	45,045	21,783	23,262	185	94	91	+ 14	-	+ 14	45,244	21,877	23,367
1959	45,242	21,876	23,366	214	111	103	+ 48	+ 15	+ 33	45,504	22,002	23,502

Table IV above brings together the figures for the two elements (natural increase and migration balance) in net population change since mid-1951.

### Changes in population structure

The trend of changes in the sex, marital condition and age structure of the population was discussed at length in the 1956 Commentary (pages 6-8). The situation may be summarised here as follows.

### Sex ratios

About 106 boys are born for every 100 girls; but the death rates for males are higher than those for females at all ages, so that the number of males per thousand females at mid-1959 falls from 1,054 at ages 0-4 to a balance in the age-group 30-34, down to 777 at ages 60-64, and only 549 at ages 75 and over (twice as many women as men). The reduction in mortality at younger ages has narrowed the differential between the two sexes and postponed the age-group in which the excess of males at birth is countered by excess male mortality from 5-9 in 1911 to 30-34 in 1959. At older ages the death rates for males have fallen much less than those for females, and consequently the excess of females at these ages has been increasing. At the 1911 Census there were 757 men for every 1,000 women at ages 65 and over; in 1959 the figure was 632.

### Age structure

We have already emphasised the remarkable reduction in the number of births which distinguishes the last half-century from the Victorian and Edwardian eras. One result has been a change in the proportion of young to old in the population. At the 1911 Census children under 15 constituted 30.6 per cent of the entire population, while only 5.2 per cent were over 65. The population aged 15-64 amounted therefore to 64.2 per cent of the whole. At mid-1959 the under-fifteens had fallen to 22.8; but those who had passed their 65th birthday made up 11.8 per cent, the group 15-64 being 65.3 per cent of the whole.

There are many and complex consequences of the increase in the number of older people in the community. Many of these arouse widespread interest. An impressive illustration of the effects of fluctuations in the number of births has been provided by the passage of the post-war births "bulge" (which reached its peak with the 881,000 live births in 1947) through the primary and then the secondary education system and its more recent entry into the labour market. The high birth rate in the later years of the nineteenth and earliest of the twentieth centuries represents another "bulge" (spread over a longer period and therefore over a wider age span) which has passed up into older age-groups and has increased the proportion of elderly persons in the population, in spite of having borne the brunt of the loss of life in the 1914-18 War. The resultant effect on the dependency of one sector of the population on another is sometimes illustrated by mere comparison of the "working" and "retired" age-groups (15-64 and 65 and over) or the "National Health Insurance population" (men 15-64; women 15-59) and those beyond these ages. While accepting with necessary qualifications the validity of comparisons between the insured sector (or, if preferred, the 15-64 sector) with the rest of the total *de facto* or home population, a shorter term view of the changing picture may overlook one important point which emerges from available figures. The ratio, present and forecast, of the total number of children and old people together (0-15 and 65 and over) to the population as a whole since the 1931 Census

has certainly increased. But comparison with the 1911 Census situation shows that this increase—especially that of the elderly component—is a “growing up” process after the population had been rendered unduly youthful by the very large numbers of births in the late Victorian and immediately subsequent years. The increase therefore represents a stage in the restoration of a more normal age structure.

In 1911 children and old people together amounted to nearly 36 per cent of the entire population (30.6 per cent 0-14; 5.2 per cent 65 and over). In 1931 they were 31 per cent (23.8 per cent 0-14; 7.4 per cent 65 and over). By mid-1959 the proportion had risen to nearly 35 per cent (22.8 per cent 0-14; 11.8 per cent 65 and over). It is estimated that while the proportion will reach 36.6 per cent in 1974 and 37.2 per cent in 1979, it will thereafter revert to about 36 per cent (22.0 per cent 0-14; 14.2 per cent 65 and over) by the end of the twentieth century. Measured in these terms, the economic pressure of dependency has not varied very much and is not greater now than in 1911. But, as part of the “growing up” referred to above, the elderly component has increased to more normal proportions.

#### Marital condition

Table V. Proportion married per 1,000 in each age-group, 1931, 1951 and 1959, England and Wales

Age	Males			Females		
	1931 (census)	1951 (census)	1959 (estimate)	1931 (census)	1951 (census)	1959 (estimate)
15-24	70	125	162	140	272	311
25-34	640	720	752	658	798	863
35-44	855	862	871	752	820	866
45-54	847	877	884	720	759	796
55-64	795	850	862	619	624	657
65 and over	619	664	692	341	352	340

From Table V above, it will be seen that as a result of the maintenance of relatively high marriage rates generally, and in particular of an increase in the number of marriages at young ages, the married proportion to the rest has increased in all age-groups except for the oldest group of females. In the drop after the early fifties the high incidence of the termination of marriages by death is obviously the significant factor. In the youngest age-group of all the proportion married has more than doubled for both men and women since 1931.

#### Future prospects

The difficulty of determining whether fluctuations are fortuitous, or indicative of a short term variation in the established pattern which will peter out with little long term effect on it, or the beginning of a new trend that will henceforward be steadily maintained, or of one that will accelerate slowly or rapidly, does not lessen the need at any one time for the best forecasting possible within the limits of available data. There is a wide field of government, industrial

and commercial activity where decisions must take account of long term population trends. The assumptions about future fertility, mortality and migration underlying the proportions of Table A5 in Part II of the 1959 *Statistical Review* are under continuous review and revisions are made as often as any change in current conditions appear to warrant them. They have, for example, been revised since the publication of the 1958 *Review* and may shortly again be revised.

On the stated assumptions underlying the projections from mid-1959, the population will have increased from 45,504,000 to 49,230,000 by mid-1979 and to over 52,000,000 by the end of the twentieth century. The population under 15 will have fallen slightly in relation to total population by 1979 (from 22.8 to 22.3 per cent) and to 22 per cent by 1999. Those aged 65 and over—11.8 per cent in 1959—will constitute 14.9 per cent of the mid-1979 population with a small reduction to 14.2 per cent in 1999.

Men in the working age-group 15-64 (14,603,000 in 1959) will have increased in number to 15,503,000 by mid-1979 and to 16,963,000 by mid-1999. Nevertheless they will constitute only 31.5 per cent of the 1979 population, compared with 32.1 per cent in 1959. In 1999 this proportion will be 32.4 per cent.

## MARRIAGES

During 1959 there were 340,126 marriages in England and Wales. This number was just over 200 more than in 1958 and about 7,000 less than in 1957. The marriage rates per 1,000 total population and per 1,000 unmarried population aged 15 and over fell slightly between 1958 and 1959. The marriage rate per 1,000 unmarried females aged 15-39, an age-group which accounts for about 90 per cent of all marriages, also fell slightly compared with 1958 although the corresponding rate for unmarried males aged 20-44 is rather higher for 1959 than for 1958, mainly due to the marked rise in both first marriage and remarriage rates in the 20-24 age-group.

Table VI. Numbers of marriages and marriage rates, 1931 and 1938 to 1959, England and Wales

Period	Marriages	Marriage rates				
		Per 1,000 total population	Per 1,000 unmarried population			
			Males aged 15 and over	Females aged 15 and over	Males aged 20-44	Females aged 15-39
1931	311,847	15.6	53.4	41.6	106.4	68.6
1938	361,768	17.6	61.2	47.8	124.5	85.5
1939-50*	381,910	17.9	68.2	53.0	139.7	106.2
1951-55*	350,916	15.8	68.3	51.4	126.0	121.4
1956	352,944	15.7	70.7	52.9	157.0	131.7
1957	346,903	15.4	70.1	52.4	157.8	132.3
1958	339,913	15.0	68.8	51.3	157.2	130.3
1959	340,126	14.9	68.5	51.2	158.9	129.3

\*Annual averages.

Among the 340,126 marriages celebrated in 1959, 287,598 were between bachelors and spinsters, comprising about 85 per cent of the total. A further 10 per cent of the total number of marriages were those where one partner was marrying for the first time but the other was remarrying. In the remaining 5 per cent of marriages both partners were remarrying.

### First marriages

#### Bachelors

Among the 340,126 men who married during 1959, 302,516 (89 per cent) were bachelors of whom 95 per cent married spinsters. Among the 14,918 bachelors who did not marry spinsters nearly twice as many married divorced women as married widows.

Table VII. First marriage rates by sex and age with ratios to those of 1938 taken as 100: 1931 and 1938 to 1959, England and Wales

The ratios were calculated before rounding off the rates

Marriage rates per 1,000 population over 15	Annual marriage rates per 1,000 population in each age-group							Period	Ratios of rates to those of 1938 taken as 100							
	15-	20-	25-	30-	35-	45-	55 and over		15-	20-	25-	30-	35-	45-	55 and over	All ages*
56.0	3.3	72.3	152.2	111.5	49.8	16.4	5.4	1931	100	83	86	87	87	89	114	86
64.8	3.2	87.0	176.8	127.5	57.0	18.5	4.8	1938	100	100	100	100	100	100	100	100
71.2	6.4	112.1	175.6	128.3	61.2	20.8	5.1	1939-50	198	129	99	101	107	113	107	113
70.8	6.7	132.1	172.5	107.7	49.1	18.2	5.1	1951-55	205	152	98	84	86	99	107	117
74.7	9.4	151.8	178.8	108.8	47.5	17.3	4.9	1956	291	174	101	85	83	94	103	128
74.3	10.6	154.6	174.8	109.4	46.8	16.5	4.9	1957	327	178	99	86	82	89	102	129
73.3	11.7	157.0	169.2	105.2	44.9	16.3	4.9	1958	360	181	96	82	79	88	102	130
72.7	11.5	159.9	167.8	104.9	44.5	15.9	4.8	1959	355	184	95	82	78	86	100	130
SPINSTERS																
51.7	17.1	106.8	119.1	57.2	21.3	7.9	2.2	1931	76	72	77	85	83	92	108	76
61.4	22.6	147.9	154.0	67.2	25.7	8.6	2.0	1938	100	100	100	100	100	100	100	100
69.5	36.8	191.1	153.3	72.8	28.9	10.2	2.0	1939-50	163	129	100	108	112	119	100	123
72.0	43.9	232.3	156.5	75.3	29.5	10.4	2.1	1951-55	195	157	102	112	115	122	103	143
77.3	54.4	262.7	163.1	79.9	30.9	10.4	2.1	1956	241	178	106	119	120	121	104	163
77.6	56.6	266.5	159.7	81.3	30.9	10.1	2.1	1957	251	180	104	121	120	118	104	166
76.9	57.8	264.3	157.1	79.3	30.5	10.0	2.1	1958	256	179	102	118	119	117	105	167
76.8	56.5	265.4	158.5	82.2	30.4	9.9	2.3	1959	251	179	103	122	118	115	112	168

\*Age-standardised.

Table VIII. Proportional distribution of first marriages in each age-group per 1,000 at all ages, and mean age at marriage, 1931 and 1938 to 1959, England and Wales

Period	15-	20-	25-	30-	35-	45-	55 and over	Age not stated	Mean age at marriage
BACHELORS									
1931	19	371	410	122	55	14	6	3	27.30
1938	17	339	413	146	64	13	5	3	27.72
1939-50	29	421	333	122	71	15	5	4	27.06
1951-55	31	478	304	104	59	17	5	2	26.55
1956	43	502	286	93	53	17	5	1	26.15
1957	49	508	279	90	53	15	5	1	26.03
1958	56	520	268	84	51	15	5	1	25.86
1959	57	529	261	83	50	14	5	1	25.77
SPINSTERS									
1931	98	480	283	78	41	11	4	5	25.47
1938	112	460	278	86	45	11	4	4	25.58
1939-50	156	504	201	67	48	14	5	5	24.75
1951-55	186	537	161	54	38	16	6	2	24.18
1956	225	530	142	47	33	15	6	2	23.73
1957	237	529	134	45	33	14	6	2	23.60
1958	250	527	128	42	31	14	6	2	23.46
1959	252	534	121	41	30	13	7	2	23.37



The proportional age distribution of both bachelors and spinsters and their mean ages at marriage are shown in Table VIII for 1959 with similar figures for earlier years. The mean age of bachelor bridegrooms was 25·8 years which represents a slight fall from 1958 and continues the slow reduction in the mean age of bachelor bridegrooms which has been apparent in recent years. Reference to Table L of Part II shows that the mean age for bachelors who married spinsters was 25·2 years, which also continues the steady decline of recent years. The mean age at marriage for bachelors marrying widows (41·3 years) continues the long-term rise in this average which may well be associated with improved mortality experience, while the mean age at marriage for bachelors marrying divorced women, at 33·8 years, differs little from the 1958 figure.

The reduction in the age at marriage shows more clearly in the proportional distribution by age of bachelor bridegrooms. Since the period before the Second World War the proportion of bachelor bridegrooms at ages 20-24 to all bachelor bridegrooms has risen from just over a third to over a half, while the proportion of bachelor bridegrooms aged 25-29 has fallen from just over 40 per cent to just over a quarter. The same accent on younger age at marriage is demonstrated by the age-group marriage rates shown in Table VII. This table shows that there has been a striking increase in the marriage rates of bachelors under the age of 25 and particularly under the age of 20, while the rates for ages 25 to 54 have tended to fall. The rates for 1959 are slightly below the corresponding rates for 1958 apart from the 20-24 age-group and the bachelor marriage rate for all ages over 15 combined fell compared with 1958. Nevertheless, the equivalent ratio roughly standardised for age (that is, the ratio of the actual rate for all ages over 15 shown in the first column of Table VII to the rate which would have resulted if the 1938 age rates had been in operation) was the same in 1959 as in 1958 owing to the greater weight given to young marriages in this ratio.

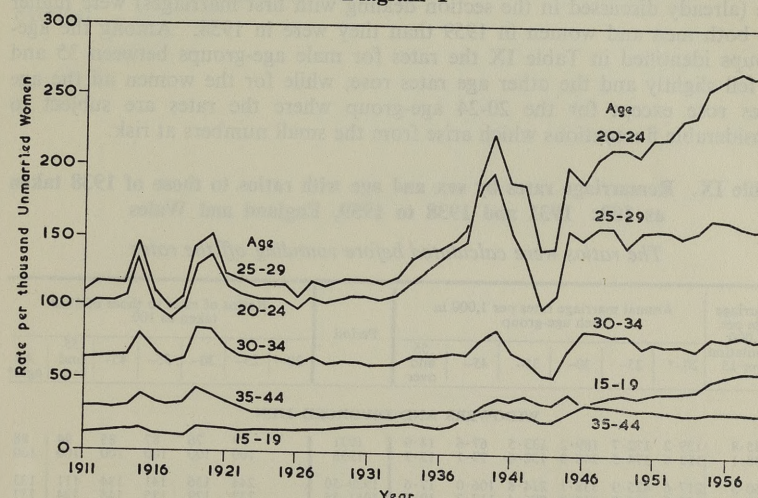
### Spinsters

Spinster brides formed 90 per cent of all women who married in 1959; 94 per cent of them married bachelors, the remainder being divided between those marrying widowers and those marrying divorced men in a ratio of 4 to 6. Spinster brides were on average 23·4 years old at marriage, 2·4 years younger on average than bachelor bridegrooms. In those marriages where spinsters married bachelors the bride was, on average, 2·6 years younger than her husband; their average age was 22·6 years in 1959, continuing the decline in this figure in recent years. The mean age of spinsters marrying widowers at 43·0 is tending to rise in the same way as the corresponding rate for bachelors marrying widows, and the mean age for spinsters marrying divorced men at 30·5 years although a little higher than 1958 does not depart significantly from the steady mean age that this group has shown in recent years.

The overall reduction of the age at marriage since before the Second World War is even more marked for spinsters than for bachelors. A quarter of all spinster brides in 1959 were under 20 years of age compared with 10 per cent in 1931 and 11 per cent in 1938. This period has also seen a steady decline in the proportion of spinster brides aged 25-29 to match the rise in the under 20 proportion. In contrast to bachelors, Table VII and Diagram 1 show that since before the Second World War spinster marriage rates have risen at all

ages, although the rise has been proportionately much greater at the youngest ages. Compared with 1958, the 1959 rates have risen slightly between the ages of 20 and 35 and also over the age of 55, while the under 20 rate has fallen slightly as has the bachelor marriage rate for the same age-group. This fall has occurred despite the increase in the number of marriages at these ages between the two years and may be accounted for by the entry into this age-group of the first of the post-war peaks in births. The spinster marriage rate per 1,000 single women over the age of 15 fell a little compared with 1958 but the age-standardised ratio (already described) continued the slow rise which has been maintained since 1938.

Diagram 1



Marriage rates\* of women by age, 1911 to 1959, England and Wales

### Minors

Among the marriages which took place during 1959 there were 37,401 in which the bridegroom was aged under 21 and 120,838 where the bride was a minor. These numbers correspond with 36,364 such bridegrooms and 119,585 such brides in 1958. Among the brides under 21 years of age 15,111 were aged 16 or 17 and a further 23,892 were 18 years old. Brides marrying under 21 outnumbered bridegrooms by just over 3 to 1, this ratio having fallen from nearly 5 to 1 in 1938 and over 4 to 1 in 1954.

The bridegroom was a minor in 11·0 per cent of all marriages in 1959 as compared with 10·7 per cent in 1958 and 6·9 per cent in 1954. More than one third (35·5 per cent) of all 1959 brides were minors. This is very similar to the proportion of brides who were under 21 in 1958 and shows a rise from 28·6 per cent in 1954. These increases illustrate in another way the general tendency to younger marriage.

\*1911-37: all marriages per 1,000 spinsters, widows and divorced women. 1938-59: first marriages per 1,000 spinsters

There were 30,252 marriages where both the bride and the bridegroom were under the age of 21, a figure which represents 8.9 per cent of all marriages and about a quarter of all the marriages where the bride was a minor.

### Remarriages

During 1959 there were 37,610 men who remarried of whom 19,372 were widowers and 18,238 were divorced men; 33,885 women remarried, 16,171 being widows and 17,714 divorced women. Combined remarriage rates for both widowed and divorced men and women are shown in Table IX for 1959 and also for earlier periods from 1931. Both the remarriage rate per 1,000 population over 15 and the equivalent ratio roughly standardised for age (already discussed in the section dealing with first marriages) were higher for both men and women in 1959 than they were in 1958. Among the age-groups identified in Table IX the rates for male age-groups between 35 and 55 fell slightly and the other age rates rose, while for the women all the age rates rose except for the 20-24 age-group where the rates are subject to considerable fluctuations which arise from the small numbers at risk.

**Table IX. Remarriage rates by sex and age with ratios to those of 1938 taken as 100: 1931 and 1938 to 1959, England and Wales**

*The ratios were calculated before rounding off the rates*

Marriage rate per 1,000 population over 15	Annual marriage rates per 1,000 in each age-group						Period	Ratios of rates to those of 1938 taken as 100						
	20-*	25-	30-	35-	45-	55 and over		20-*	25-	30-	35-	45-	55 and over	All ages†
<b>WIDOWERS AND DIVORCED MEN</b>														
35.8	139.2	172.7	189.2	133.5	67.6	14.9	1931	99	76	87	85	94	88	
38.1	153.6	174.5	248.0	152.6	79.1	15.9	1938	100	100	100	100	100	100	
50.5	217.6	425.9	338.1	214.8	106.0	17.6	1939-50	244	136	141	134	111	133	
55.2	133.7	406.8	318.8	206.4	117.2	19.7	1951-55	233	129	135	148	124	137	
50.5	94.0	347.2	262.8	168.8	109.7	20.1	1956	199	106	111	139	126	124	
48.4	75.5	289.4	235.9	157.6	105.3	20.1	1957	166	103	103	133	126	119	
45.8	104.3	242.6	253.2	146.1	98.5	19.6	1958	139	102	96	125	123	113	
46.7	123.3	244.5	257.5	145.2	97.9	20.8	1959	140	104	95	124	131	116	
<b>WIDOWS AND DIVORCED WOMEN</b>														
9.8	128.2	138.8	94.1	36.5	14.1	2.2	1931	65	81	82	73	96	89	
10.2	197.1	172.4	114.2	50.1	14.7	2.5	1938	100	100	100	100	100	100	
15.7	294.0	308.6	170.3	73.0	21.6	2.7	1939-50	149	179	149	146	146	109	
16.1	403.0	355.6	188.2	84.2	29.3	3.0	1951-55	204	206	165	168	199	122	
14.4	450.0	460.0	196.1	80.5	29.7	3.0	1956	228	267	172	161	201	122	
13.6	425.7	472.7	186.3	77.6	29.9	3.0	1957	216	274	163	155	203	121	
12.6	603.5	482.8	210.8	73.2	28.3	3.0	1958	306	280	185	146	192	120	
12.8	487.7	488.7	212.5	79.1	29.9	3.0	1959	247	283	186	158	203	122	

\*Based on small numbers.  
†Age-standardised.

### Widowed persons

Among the 19,372 widowers who remarried during 1959, 45 per cent married widows, 40 per cent spinsters and 15 per cent married divorced women, while among the widows who remarried in 1959, 54 per cent married widowers, 32 per cent bachelors and 14 per cent married divorced men. These proportions

are similar to those which have obtained during recent years. For the last thirty years a higher proportion of widowers have married spinsters than widows have married bachelors, although the proportion of the former has fallen from over 60 per cent between 1926 and 1940 to the current level of about 40 per cent. The proportion of widows who marry bachelors has fallen since 1950 from just under a half to the current level of about 30 per cent. A large part of the decline in the proportion of widowed persons who marry spinsters and bachelors is due to the rise in the proportion who marry divorced persons although there has also been a slow rise in the proportion of widowed persons who intermarry.

The proportional age distributions of widowers and widows who remarried in 1959 and also during selected periods since 1891-95 are shown in Table X overleaf.

Table X. Proportional age distribution of remarriages of widowed persons, 1891 to 1959, England and Wales

	Age of widowers											Period	Age of widows										
	Under 25	25-	30-	35-	40-	45-	50-	55-	60-	65 and over	Not stated		Under 25	25-	30-	35-	40-	45-	50-	55-	60-	65 and over	Not stated
16	12	76	132	153	148	126	106	74	55	47	71	1891-1895	28	115	170	177	157	119	78	47	29	14	66
	10	73	131	158	150	136	109	84	56	49	44	1896-1900	27	113	175	188	157	127	81	50	28	14	40
	10	68	130	155	152	136	116	83	62	52	36	1901-1905	29	122	182	190	158	118	78	47	29	15	32
	8	61	123	153	152	141	119	90	62	61	30	1906-1910	24	106	177	192	160	129	82	52	30	20	28
	7	53	109	151	150	146	125	97	68	71	23	1911-1915	22	98	167	193	171	135	85	51	32	27	19
	7	54	105	138	151	155	130	101	70	65	24	1916-1920	70	189	191	162	126	98	64	41	24	19	16
	8	55	109	137	135	136	126	104	79	87	24	1921-1925	26	134	200	182	138	109	77	52	33	30	19
	6	49	91	117	126	133	133	116	91	114	24	1926-1930	15	76	145	175	156	135	103	75	50	51	19
	6	46	97	112	119	126	131	120	96	124	23	1931-1935	16	72	131	162	157	143	110	76	53	62	18
	5	43	89	112	113	124	130	126	101	134	23	1936-1940	18	70	116	149	154	146	115	83	61	69	19
	6	35	70	99	115	123	134	130	112	151	25	1941-1945	66	110	117	118	134	134	105	79	59	59	19
	6	37	68	95	106	122	127	127	113	179	20	1946-1950	46	151	150	130	110	114	95	72	57	60	15
	3	23	49	65	92	117	141	143	129	221	17	1951-1955	13	52	101	117	132	142	138	105	87	98	15
	2	17	40	55	77	110	137	161	139	244	18	1956	15	41	72	103	133	147	143	120	99	112	15
	2	15	36	51	75	112	139	167	139	246	18	1957	14	37	65	101	124	152	145	124	106	116	16
	3	14	32	55	69	107	141	157	144	260	18	1958	12	31	58	102	114	153	145	130	113	127	15
3	16	29	54	64	102	137	163	147	268	17	1959	15	37	58	94	109	151	149	124	116	131	16	

In 1959 just over two fifths of the widowers who remarried were over 60 years of age compared with a quarter of the widows. It is clear from Table X that the widows who remarried in 1959 had a younger age distribution than the widowers and Table L in Part II shows that the average age at remarriage for widowers was almost 57 years compared with almost 51 for widows. This age difference of six years is greater than the average difference in age at marriage of spinsters and bachelors. This is, in part, to be expected as the women at risk of marriage to a relatively old widower will tend to be younger than he is (the older the widower the greater the possible difference in age between him and his partner) and any compensating effect on the average age at marriage induced by marriages to both older and younger partners is therefore reduced.

Over the period shown in Table X the age at remarriage of widowed persons has risen. This is due to the improvement in mortality conditions over the last 70 years which has increased the average age of widowhood. In 1891-95, over half the widowers who remarried were under 45 years of age compared with 17 per cent in 1959, and 5 per cent were aged 65 and over in 1891-95 compared with more than a quarter in 1959. A similar change can also be seen for widows. The lines in Table X for 1916-20, 1921-25, 1941-45 and 1946-50 reflect the deaths during the two world wars in the increased proportions of all remarriages at relatively young ages.

#### **Divorced persons**

Among the 18,238 divorced men who remarried during 1959, 60 per cent married spinsters, 12 per cent married widows and the remaining 28 per cent married divorced women, while among the 17,714 divorced women who remarried, 55 per cent married bachelors, 17 per cent married widowers and 28 per cent married divorced men. The proportional distribution of marriages of divorced men according to the previous marital condition of their partner was similar to that of recent years, although the last thirty years have seen a fall in the proportion of divorced men who marry spinsters from nearly 80 per cent to the present level. This decline is accounted for by the rise in the proportion who marry divorced women which is linked to the increased frequency of divorce during this period. In 1959 the distribution of marriages of divorced women according to the previous marital condition of their partner is also similar to recent years and the main feature of the last thirty years has again been the increase in the proportion of divorced women who marry divorced men; this proportion has recently been at a level which is two and a half times that which obtained in the 1926-30 period. The main compensating fall has been in the proportion of divorced women who marry bachelors.

Table XI shows the proportional age distribution of divorced men and women who remarried in 1959 and in earlier years going back to 1941-45.

Table XI. Proportional age distribution of remarriages of divorced persons, 1941 to 1959, England and Wales

Age of divorced men											Period	Age of divorced women											
Under 25	25-	30-	35-	40-	45-	50-	55-	60-	65 and over	Not stated		Under 25	25-	30-	35-	40-	45-	50-	55-	60-	65 and over	Not stated	
18	11	78	196	247	202	135	73	35	15	7	1	1941-1945	30	169	262	229	161	87	37	16	6	1	2
	12	150	242	236	168	102	51	23	10	5	1	1946-1950	66	285	251	188	109	60	26	9	4	1	1
	11	117	223	206	181	129	75	34	15	9	0	1951-1955	49	213	260	187	137	85	42	17	6	3	1
	15	116	200	191	173	143	89	46	17	9	1	1956	55	194	232	192	142	99	52	22	8	3	1
	13	119	200	200	164	140	87	48	18	11	0	1957	55	192	217	194	146	103	56	23	8	5	1
	14	119	191	202	160	142	90	49	21	12	0	1958	59	191	211	200	136	106	58	24	10	4	1
	14	114	192	206	154	137	96	51	23	12	1	1959	57	185	208	200	136	109	62	26	11	5	1

This table shows that about two in every five divorced persons who remarried in 1959 were between the ages of 30 and 40 (compared with only 12 per cent of bachelors and 6 per cent of spinsters). The age distribution of divorced men is rather older than that of divorced women and this is reflected in Table L of Part II which shows that the average age at marriage of divorced men who remarried in 1959 was 41 years compared with 37 for divorced women. The age distribution of remarriages of divorced men and women in 1959 was a little older than that for the 1941-45 period but the main feature demonstrated by Table XI was the comparatively young age distribution of the remarriages of divorced persons immediately after the Second World War, a peak period for remarriages of divorced persons being closely linked with the peak in the number of divorces during the same period.

#### Widowed and divorced women

An attempt has been made to compute some marriage rates for the widowed and divorced separately for years since 1951, in the first place for women. They are rather tentative estimates, particularly at the younger ages, but probably give the correct impression of the differentials. The figures are shown in Table XII for age-groups over 25.

**Table XII. Remarriage rates of women by age, 1951 to 1959, England and Wales**  
*Per 1,000 population in each group by age and condition*

All ages	Widows					Year	Divorced women					
	25-	30-	35-	45-	55 and over		All ages	25-	30-	35-	45-	55 and over
9	165	113	56	22	3	1951	153	373	246	144	68	22
8	174	121	54	23	3	1952	150	406	249	146	73	21
8	180	111	56	22	3	1953	136	378	239	132	70	20
8	215	110	54	23	3	1954	125	370	225	125	63	19
8	255	127	56	24	3	1955	124	384	236	128	64	20
7	277	125	56	23	3	1956	115	381	228	122	60	18
7	278	133	54	23	3	1957	107	361	219	117	58	17
6	219	133	51	22	3	1958	98	350	216	110	53	16
7	266	168	53	23	3	1959	96	351	228	110	54	16

From the rates of Table XII it would seem that the marriage rates of divorced women are rather higher than those of widows of the same age; even the latter are higher than the corresponding rates for spinsters in Table VII. The marriage rates of widows have risen at the younger ages and have remained relatively stable over the age of 35, while the marriage rates of divorced women have tended to fall since 1951.

#### The relation between marriage rates and population structure

A set of marriage rates can be summarised in the form of a nuptiality table in the same way as death rates may be presented in the form of a life table. This is a convenient way of demonstrating the implications of a set of marriage rates and the results can be combined with fertility rates or mean family sizes in the calculation of replacement rates.

Net nuptiality tables for males and females based on the marriage rates of 1951-55 were published in Appendix C of the 1956 Commentary. Since then marriage rates at the younger ages have risen and abridged nuptiality tables have been calculated to indicate the general effect of this rise. Table XIII has been produced from the 1951-55 nuptiality tables and abridged nuptiality tables for 1959; it shows the proportions ever-married which would obtain between the ages of 15 and 50 if the marriage rates for these particular years were to continue indefinitely. Table XIV on the other hand shows the proportions ever-married at these ages for census years since 1881 and also in the annual population estimates for 1941, 1946, 1956 and 1959.

**Table XIII. Proportions ever-married, according to the net nuptiality of 1951-55 and 1959, England and Wales**  
(Per thousand)

Men		Age-group	Women	
Nuptiality of			Nuptiality of	
1951-55	1959		1951-55	1959
6	10	15-19	49	61
251	299	20-24	528	587
685	742	25-29	838	881
844	865	30-34	909	932
897	908	35-39	931	949
920	927	40-44	940	955
930	935	45-49	945	959

**Table XIV. Proportions ever-married among men and women, 1881 to 1959, England and Wales**  
(Per thousand)

Age of men							Year	Age of women						
15-	20-	25-	30-	35-	40-	45-49		15-	20-	25-	30-	35-	40-	45-49
5	223	609	769	848	878	901	1881	26	335	649	777	834	861	877
4	194	573	753	838	871	896	1891	20	299	606	754	823	850	871
3	174	548	748	824	861	886	1901	16	274	588	745	801	831	858
2	143	508	728	814	852	873	1911	12	243	566	730	790	820	835
4	178	554	769	837	863	876	1921	18	274	590	740	796	821	832
3	139	529	782	863	887	890	1931	18	258	594	751	794	819	832
9	203	617	803	864	888	906	1941	39	402	719	783	801	827	831
9	199	612	798	864	881	891	1946	35	442	713	829	832	836	840
5	238	651	810	867	891	902	1951	44	482	783	854	867	858	848
8	277	665	835	875	897	911	1956	55	542	813	884	890	895	869
12	318	674	843	883	899	916	1959	61	569	835	900	899	909	885

On the basis of 1959 nuptiality only 6.5 per cent of the men and 4.1 per cent of the women in the 45-49 age-group would remain unmarried. Comparison between Tables XIII and XIV shows that at all but the youngest ages shown, the proportions implied by either the 1951-55 or the 1959 marriage rates are rather higher than any that have actually been recorded in England and Wales. The proportion ever-married for the 45-49 age-group based on 1959 nuptiality

exceeded those at the 1951 Census by 3 per cent for men and 11 per cent for women, and also exceeded the proportions in the estimated population at mid-1959 by 2 per cent for men and 7 per cent for women.

It should be remembered that nuptiality tables are based on a population with a particular sex and age structure. It is therefore possible for the male and female tables to be inconsistent in the sense that if the marriage rates on which they are based were to continue in effect indefinitely, they would produce more marriages of men under 50 than of women under 45 though these two are usually about equal in number. The reason for this feature is that the sex and age structure of the present unmarried population still contains the balance of the former surplus of women which is now, however, becoming confined to the older ages where few marriages take place. In this way the abridged nuptiality table of 1959 implies 2 per cent more marriages of men under 50 than of women under 45 (the excess was 3 per cent in the 1958 abridged nuptiality table). This effect appears to be one factor behind the recent situation in which, while the first marriage rates for the older age-groups of both sexes are tending to fall, the rates for men have decreased rather more than those for women.

The probabilities of marriage on which the abridged nuptiality tables for a given year are based refer to the experience of different generations in a single calendar year. One effect of this is to make them of limited value as a guide to long-term prospects for which it would be better to compare the experiences of different generations at the same ages but in different calendar periods rather than different generations at different ages in the same calendar period as is done in Table XIV. Table XV is a rearrangement of Table XIV to facilitate such comparisons. The use of census data at intervals of ten years prevents the tracing of a generation at shorter intervals without the use of interpolation procedures, which have therefore been used to estimate the proportions at ages 20-24, 30-34 and 40-44 for generations before 1902-06. For the more recent generations the use of data from the annual population estimates provides proportions in each five year group.

**Table XV. Proportions ever-married among generations of men and women born since 1862, England and Wales**  
(Per thousand)

Age of men							Period of birth	Age of women						
15-	20-	25-	30-	35-	40-	45-49		15-	20-	25-	30-	35-	40-	45-49
5	209*	573	751*	824	855*	873	1862-66	26	318*	606	749*	801	824*	835
4	184*	548	735*	814	855*	876	1872-76	20	286*	588	736*	790	820*	832
3	155*	508	746*	837	876*	890	1882-86	16	255*	566	733*	796	820*	832
2	161*	554	777*	863	889*	906	1892-96	12	258*	590	744*	794	821*	831
4	160*	529	763	864	881	902	1902-06	18	257	594	740	801	836	848
3	139	530	803	864	891	911	1907-11	14	258	616	783	832	858	869
3	152	617	798	867	897	—	1912-16	18	290	719	829	867	895	—
6	203	612	810	875	—	—	1917-21	22	402	713	854	890	—	—
9	199	651	835	—	—	—	1922-26	39	442	783	884	—	—	—
9	238	665	—	—	—	—	1927-31	35	482	813	—	—	—	—
5	277	—	—	—	—	—	1932-36	44	542	—	—	—	—	—
8	—	—	—	—	—	—	1937-41	55	—	—	—	—	—	—

\*Interpolated values.

Table XV illustrates the slow but steady rise in the proportion ever-married at 45-49 for both men and women. There has been a rise in the proportion

ever-married at all age-groups for both men and women since the beginning of the century, although the later part of the nineteenth century was marked by a slight fall in the proportion ever-married. Comparison of the columns for the 35-39 age-group for men and women shows the relative change in the proportions married; from the 1862-66 generation the excess of the ever-married proportion of men over that for women rose from 23 per thousand to 69 per thousand in the 1892-96 generation then fell to zero for the 1912-16 generation while the 1917-21 generation shows a female excess of 15 per thousand. An examination of Table XV shows that the proportion ever-married at ages 45-49 seems likely to rise, particularly for women where the proportion in the 1959 condition estimate for this age-group was below the 895 per thousand of the 1912-16 generation who were ever-married before reaching the 40-44 age-group. It seems likely that the proportions ever-married in actual generations of men and women will move towards those implied by the nuptiality tables unless any major disturbing factor arises.

Comparisons have been made above between the proportions of men and women in the same age-group. Allowance should, however, be made for the difference between the average age at marriage of men and women. In order to obtain a useful estimate of the relative numbers of men and women in the main marrying age-groups a rough allowance has been made for this difference by relating the average of the male populations at ages 15-44 and 20-44 last birthday (about 17½-45 in exact years) to the average of the female populations at ages 15-44 and 15-39 last birthday (15-42½ in exact years). The estimates so obtained are as follows:

	Census						Mid-1959 (estimate)	Nuptiality table 1951-55	Abridged nuptiality table 1959
	1871	1901	1911	1921	1931	1951			
All conditions	877	876	892	846	892	988	999	1,039	1,042
Unmarried	786	787	808	724	800	968	1,056	1,087	1,114

The last two columns are based on the average number of survivors in the net nuptiality tables for 1951-55 and 1959 and it should be remembered that the ratios for the unmarried in these columns are affected by the inconsistency in male and female marriage rates which has already been discussed. If the female rates were to become consistent with the male there would be fewer unmarried women left and the ratios would be slightly larger. The sequence of the figures shows that a combination of factors, including the slight increase in the proportion of male live births, the decrease in the predominantly male net emigration and the much smaller number of male war deaths in 1939-45 than in 1914-18, has been establishing a balance between the sexes.

#### Total married women of reproductive age

The effect of high marriage rates in raising the proportion of the population which is married is an important influence on the fertility of the community which depends to a considerable extent on the number of married women in the population. Table XVI shows the proportions married in five year age-groups under 50 for selected years since 1911 when the rise in the proportion

married first became apparent. The proportions are also shown for the 15-49 aggregate age-group and also for the more critical 20-39 age-group within which 90 per cent of births occur.

**Table XVI. Married women per 1,000 total female population in each age-group and ratio of proportion to that of 1938 taken as 100: selected years 1911 to 1959, England and Wales**

Year	Age-group							Aggregates	
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	20-39	15-49
Married women per 1,000 total female population									
1911	12	242	558	711	752	755	729	552	502
1931	18	257	587	733	755	749	733	572	529
1938	23	328	643	733	771	768	736	623	566
1946	35	436	696	800	797	784	762	686	626
1951	42	475	769	828	832	812	780	731	666
1957	60	552	814	872	862	851	810	782	703
1958	61	561	822	880	867	854	815	789	706
1959	61	566	830	886	870	861	821	794	707
Ratio of proportion to that of 1938 taken as 100 (Calculated before rounding off the proportions)									
1911	52	74	87	97	97	98	99	89	89
1931	78	78	91	100	98	98	100	92	93
1938	100	100	100	100	100	100	100	100	100
1946	153	133	108	109	103	102	103	110	111
1951	184	145	120	113	108	106	106	117	118
1957	260	168	127	119	112	111	110	125	124
1958	265	171	128	120	112	111	111	127	125
1959	266	173	129	121	113	112	112	127	125

The proportion married increases with advancing age, at first rapidly and then more slowly, to a maximum close to age 35; as new marriages are increasingly offset by widowhood the proportion then declines slowly. The proportion married has increased within each age-group throughout the period shown in Table XVI. The proportion married in 1959 exceeded that of 1938 by 166 per cent at ages 15-19 and by 73 per cent at ages 20-24; the rise of 29 per cent at ages 25-29 is hardly less significant as it applies to larger proportions married.

The column for the 15-49 age-group represents the fraction of the reproductive years which fall within married life, and Table XVI shows a slight increase in this fraction from 50.2 per cent to 52.9 per cent between 1911 and 1931 followed by a more rapid rise to 56.6 per cent in 1938 and 70.7 per cent in 1959. These increases are partly due to the ageing of the 15-49 age-group since 1911 which has increased the relative number at the older ages in this age-group where the proportion married is greater. This element can be removed by calculating the number of women who would have been married if the age-group proportions married had been those of 1911; the actual number



of married women can then be divided by the standardised number to produce a set of marriage indices standardised on the 1911 proportions married. These indices are compared with the unstandardised figures derived from Table XVI in the following statement:

Year	1911	1921	1931	1941	1951	1958	1959
Standardised	1·000	1·008	1·022	1·125	1·200	1·280	1·291
Unstandardised	1·000	1·025	1·054	1·201	1·327	1·406	1·408

The above figures show that the true increase in the proportion married among women aged 15-49 was 29 per cent compared with the 41 per cent suggested by the unstandardised proportions. A little less than a third of the latter increase is due to the ageing of the population and is unrelated to the changing incidence of marriage.

#### Seasonal incidence of marriage

The numbers of marriages and rates per 1,000 population by calendar quarter are shown in serial form in Table D of Part II and monthly numbers of marriages since 1947 are shown in Table N with ratios of the daily average for each month to that of the calendar year.

The proportions of the marriages of each year which took place in each quarter for years since the 1841-50 period are shown in Table XVII and illustrated in Diagram 2.

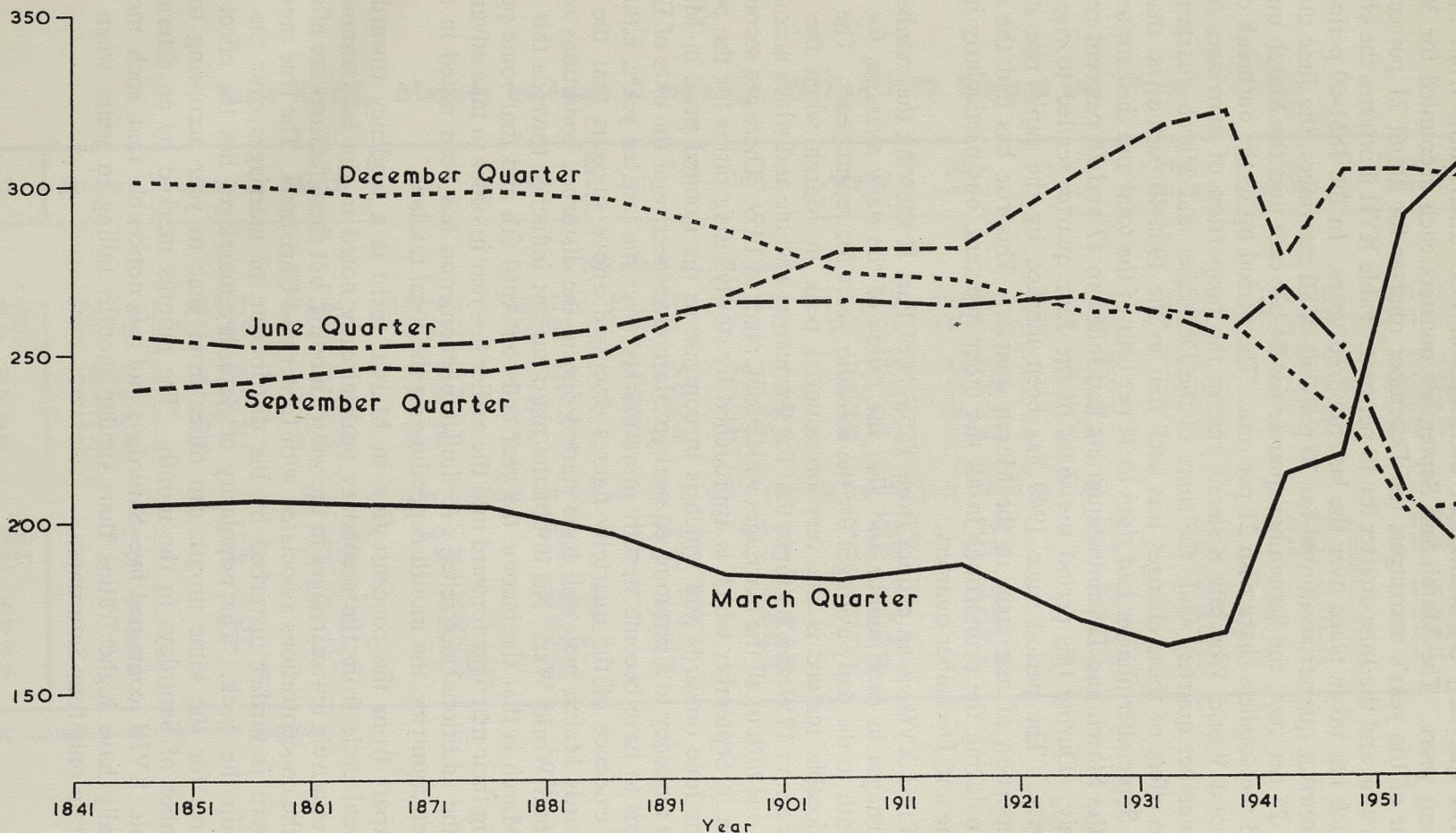
**Table XVII. Proportion of marriages in each quarter, 1841 to 1959, England and Wales**

Period	Quarter ended			
	March	June	September	December
1841-1850	205	255	239	301
1851-1860	206	252	242	300
1861-1870	205	252	246	297
1871-1880	204	253	245	298
1881-1890	197	257	250	296
1891-1900	184	265	266	285
1901-1910	182	265	280	273
1911-1920	186	263	280	271
1921-1930	170	266	303	261
1931-1935	162	260	317	261
1936-1940	166	253	321	260
1941-1945	212	268	276	244
1946-1950	218	250	303	229
1951-1955	289	206	303	202
1956-1959	305	191	301	203
1956	303	195	303	199
1957	317	190	299	194
1958	302	195	299	204
1959	298	186	302	214

Number of marriages  
per 1,000 total

Diagram 2

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Proportion of marriages in each quarter, 1841 to 1959, England and Wales

The quarterly distribution of marriages in 1959 differs little from that of recent years. The March and September quarters each accounted for 30 per cent of the year's marriages, the December quarter for about 21 per cent of the total and the June quarter for 19 per cent. Table XVII illustrates the change which has taken place over the last hundred years. In the 1851-60 period the December quarter accounted for 30 per cent of all marriages, the June quarter for 25 per cent, the September quarter for 24 per cent and the March quarter had the smallest share with 21 per cent. The period up to the outbreak of the Second World War saw a steady rise in the proportion of marriages in the September quarter, while the share of the December and March quarters fell. The effect of these changes was such that in the 1936-40 period the share of the September quarter had risen to 32 per cent of the total and the proportions in the March and December quarters had fallen to 17 and 26 per cent respectively. During this period the share of the June quarter tended to rise very slowly. The period since 1940 has been marked by the rapid rise in the proportion of marriages in the March quarter. This rise has had the effect of reducing the proportions in all the other quarters, but particularly in the June and December quarters.

Table XVIII is an extract from Table N of Part II showing the numbers of marriages in each month and also the ratios of the daily averages for each month to the daily averages for the calendar years for recent years. The most noticeable feature is the very pronounced peak in March when the daily average in 1959 was 2.3 times that for the year as a whole and which accounted for one fifth of all the marriages which took place in 1959. There is a secondary peak in September which is approached by slowly rising ratios for the period from June onwards and which is in contrast to the isolated peak in March. The tendency to a pronounced peak in March irrespective of the date of Easter seems to have become steadily more marked over the last ten years, although the evidence of the quarterly figures discussed above suggests that the shift towards March may well have started during the disturbed conditions of the Second World War. No doubt the main current influence towards this peak in March is that the income tax year ends on April 5th and that some people bring their marriage forward into the earlier tax year in order to take advantage of the additional tax relief. A similar phenomenon has been noted in some other countries, the month depending on the local tax law.

Apart from the concentration in March, there is a tendency towards an annual cycle from the secondary peak already noted in the late summer to the relatively few marriages in the winter months, but these features are affected by the concentrations associated with Easter and Christmas. The true monthly pattern is further disturbed by the distribution of marriages over the days within the week. The popularity of Saturday marriages has the effect that figures for the same month can differ from year to year according to the number of Saturdays in the month. The months marked by an asterisk in Table XVIII contained five Saturdays and it is noticeable that such months usually have higher ratios than similar months falling in years when they contain only four Saturdays.

Table XVIII. Monthly incidence of marriage, 1947 to 1959, England and Wales

Period	January	February	March	April	May	June	July	August	Sep- tember	Octo- ber	Nov- ember	Dec- ember	Total for period
Numbers of marriages													
1947-1950	79,800	86,917	172,641	137,984	88,828	151,447	162,258	146,750	162,808	105,026	82,372	154,801	1,531,632
1951-1955	77,794	106,484	322,146	127,251	85,085	149,785	173,716	172,504	185,313	114,109	81,472	158,920	1,754,579
1956	13,651	19,898	73,573	21,113	15,529	32,179	30,144	34,503	42,276	21,158	15,947	32,973	352,944
1957	13,894	19,954	76,244	19,034	12,150	34,620	28,458	38,192	36,967	21,817	18,199	27,374	346,903
1958	12,940	20,777	68,912	21,229	17,434	27,548	27,900	37,115	36,683	24,005	19,048	26,322	339,913
1959	15,430	18,972	67,028	20,121	17,142	26,018	27,390	35,601	39,600	32,649	15,548	24,627	340,126
Ratio of daily average for the month to daily average for the year taken as 1,000													
1947-1950	614	734	1,328	1,097	683	1,204	1,248	1,129	1,294	808	655	1,191	1,000
1951-1955	522	786	2,163	883	571	1,039	1,166	1,158	1,286	766	565	1,067	1,000
1956	456	712	2,462*	730	520	1,113*	1,008	1,155	1,462*	709	552	1,104*	1,000
1957	472	750	2,588*	668	412	1,214*	966	1,296*	1,297	741	638*	929	1,000
1958	448	797	2,387*	760	604*	986	966	1,286*	1,313	832	682*	912	1,000
1959	534*	727	2,320	720	593*	931	948	1,232*	1,416	1,130*	556	852	1,000

\*These months contained five Saturdays.

### Marriage incidence in different parts of the country

The numbers of marriages in regions, counties and county and metropolitan boroughs are shown in Table F of Part II, and the number of persons marrying in each region and conurbation by age and previous marital condition in Table M. These figures have to be used with caution because the district where the marriage takes place may contain the residence of only one of the parties and sometimes of neither. This factor distorts differences between marriage rates for local areas, though less so in comparisons between areas as large as regions and conurbations, and Table XIX shows the marriage rates of 1959 for these areas. In addition to the marriage rates per 1,000 population of all ages, Table XIX shows the marriage rates per 1,000 unmarried women in the age-groups between 15 and 44 and also for the 15-44 aggregate in both an unstandardised form and, in addition, standardised on the England and Wales age distribution. Table XIX also shows the ratios of the 15-44 age-group rates on the different bases for regions and conurbations to those of England and Wales.

Table XIX. Marriage rates in regions and conurbations, 1959, England and Wales

The ratios were calculated before rounding off the rates

Area	Persons marrying per 1,000 population of all ages	Women marrying per 1,000 unmarried women aged						Ratio of rate to that of England and Wales				
		15-	20-	25-	30-	35-44	15-44		Persons marrying per 1,000 population of all ages	Women marrying per 1,000 unmarried women aged 15-44		
							Unstandardised	Standardised		Unstandardised	Standardised	
ENGLAND AND WALES ... ..	15.0	56.5	265.8	168.8	98.3	43.6	112.6	112.6	1,000	1,000	1,000	
Northern Region ... ..	15.2	48.8	278.4	178.8	94.4	45.1	112.6	112.4	1,014	1,000	998	
Tyneside Conurbation ... ..	16.4	49.4	272.7	186.2	100.3	48.3	114.6	112.9	1,092	1,018	1,003	
Remainder of Northern ... ..	14.8	48.6	280.7	175.8	91.8	43.7	111.8	112.2	986	993	996	
East and West Ridings Region ... ..	15.2	59.3	309.9	179.5	93.4	42.4	120.4	124.0	1,015	1,070	1,101	
West Yorkshire Conurbation ... ..	15.7	60.0	309.3	186.5	101.2	39.7	122.6	124.9	1,046	1,089	1,109	
Remainder of East and West Ridings ... ..	14.9	58.9	310.4	173.9	87.2	44.9	118.9	123.4	995	1,056	1,096	
North Western Region ... ..	14.9	53.6	264.4	161.0	89.6	38.5	109.3	108.9	997	970	967	
South East Lancashire Conurbation ... ..	15.0	59.6	277.5	166.6	94.9	41.7	114.7	115.9	1,002	1,019	1,030	
Merseyside Conurbation ... ..	16.2	46.2	233.6	160.0	94.9	38.3	101.6	98.7	1,083	903	877	
Remainder of North Western ... ..	14.2	53.1	274.1	156.5	81.5	35.6	109.3	109.4	948	971	972	
North Midland ... ..	14.7	64.5	297.6	179.2	108.8	47.7	122.2	125.5	982	1,085	1,115	
Midland ... ..	15.2	59.4	274.9	166.0	98.5	47.2	116.7	116.2	1,016	1,037	1,032	
West Midlands Conurbation ... ..	16.4	62.9	280.9	169.4	103.9	51.3	122.5	120.5	1,096	1,088	1,070	
Remainder of Midland ... ..	14.1	55.8	268.2	162.4	92.8	43.1	110.8	111.8	939	984	993	
Eastern ... ..	12.3	53.0	231.1	138.1	83.5	34.9	98.0	98.4	819	870	874	
London and South Eastern Region ... ..	16.4	56.5	251.0	179.2	109.9	46.8	114.0	111.4	1,093	1,013	989	
Greater London Conurbation ... ..	16.6	54.7	239.1	182.1	113.7	48.4	113.1	108.6	1,106	1,004	965	
Remainder of London and South Eastern ... ..	15.8	61.4	293.1	168.6	96.4	41.8	117.0	120.5	1,054	1,039	1,070	
Southern ... ..	13.5	59.8	249.8	151.4	92.6	41.3	106.5	108.5	900	946	963	
South Western ... ..	14.4	57.6	271.4	164.3	91.2	42.2	111.9	113.3	958	994	1,006	
Wales (including Monmouthshire) ... ..	14.6	54.2	259.7	169.4	96.1	43.1	109.8	109.9	977	975	976	
Wales I (South East) ... ..	14.9	59.0	276.0	167.4	92.3	44.6	114.5	115.6	994	1,017	1,027	
Wales II (remainder) ... ..	14.0	41.8	223.5	173.7	104.5	40.1	98.7	96.4	933	877	856	

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The Greater London Conurbation has the highest rate per 1,000 population for the individual areas shown in Table XIX, being 11 per cent higher than England and Wales. Three other conurbations (Merseyside, Tyneside and West Midlands) all have marriage rates per 1,000 population which are between 8 and 10 per cent higher than England and Wales and the London and South Eastern Region has the highest rate for a complete region. At the other extreme the Eastern Region has a rate which is 18 per cent below that of England and Wales and the Southern Region and Wales II also show low marriage rates per 1,000 population.

If the comparison is made in terms of the number of marriages per 1,000 unmarried women aged 15-44 a rather different picture emerges, indicating that many of the differences in the marriage rates per 1,000 population are due not to variations in the probability of marriage but to differences in the sex, age and marital condition structure of the populations of the different areas. The West Yorkshire and West Midlands Conurbations and the North Midland Region with rates that are 9 per cent higher than England and Wales show the highest rates per 1,000 unmarried women aged 15-44. On the other hand the Eastern Region and Wales II still have relatively low rates on this basis. The Merseyside Conurbation, where the marriage rate per 1,000 population is 8 per cent above the England and Wales rate, has a rate per 1,000 unmarried women aged 15-44 which is more than 9 per cent below the corresponding national rate. The effect of the difference in the basis of the rates is also demonstrated by the upward change in the rate for the North Midland Region and both parts of the East and West Ridings Region and the downward movement in the rates for the Greater London and Tyneside Conurbations when the number of marriages is expressed in terms of unmarried women aged 15-44.

The effect of further standardisation on the basis of the England and Wales age distribution within the 15-44 aggregate age-group is in general to shift the rates a little further in the same direction. The relative proportion of unmarried women in the 15-44 age-group is of more importance as a factor affecting the relative frequency of marriage than the age distribution within that group. Nevertheless, the differences in the proportion of unmarried women in the 15-44 age-group do not account entirely for the differences in the frequency of marriages between the areas in Table XIX. The marriage rates per 1,000 unmarried women in the North Midland Region and the West Midlands Conurbation are higher than the England and Wales rates for all the age-groups identified in Table XIX and the same is true for most age-groups in both parts of the East and West Ridings Region. Conversely, the rates are lower for all age-groups in the Eastern Region and the Merseyside Conurbation and for most age-groups in the Southern Region.

The general ranking of the areas in Table XIX is similar in both 1959 and 1958 though there are differences in detail. As far as the Southern and South Western Regions are concerned, the comparison is disturbed by the transfer of the whole of Dorset from the Southern to the South Western Region. This has the effect of raising slightly the rates in the South Western Region with a corresponding fall in the rates for the Southern Region.

## DIVORCES

The numbers of dissolutions and annulments of marriage showing petitions filed and decrees absolute granted in 1959 and past years are shown in Table O in Part II and the dissolutions and annulments of 1959 are analysed further in Tables P1 to P6 of Part II. In 1959 there were 25,689 petitions for dissolution of marriage and 638 for annulment; 23,837 decrees for dissolution of marriage and 449 for annulment of marriage were made absolute. The numbers of petitions and decrees absolute for dissolution represent a slight increase over the figures for 1958 but the numbers of petitions and decrees for annulment are below the level of the past few years. The 24,286 decrees for dissolution and annulment which were made absolute in 1959 represent a rate of 21 per 10,000 married couples.

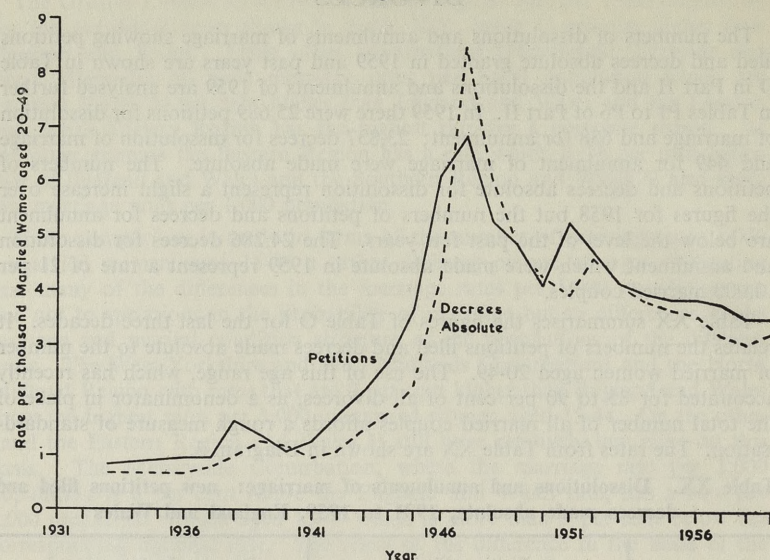
Table XX summarises the figures of Table O for the last three decades. It relates the numbers of petitions filed and decrees made absolute to the number of married women aged 20-49. The use of this age range, which has recently accounted for 85 to 90 per cent of all divorces, as a denominator in place of the total number of all married couples affords a rough measure of standardisation. The rates from Table XX are shown in Diagram 3.

Table XX. Dissolutions and annulments of marriage: new petitions filed and decrees made absolute, 1931 to 1959, England and Wales

Year	Petitions filed		Decrees absolute granted	
	Number	Per 1,000 married women aged 20-49	Number	Per 1,000 married women aged 20-49
1931-35*	4,784	0.80	4,011	0.67
1936	5,749	0.92	4,057	0.65
1937	5,903	0.93	4,886	0.77
1938	10,233	1.59	6,250	0.97
1939	8,703	1.33	7,955	1.22
1940	7,086	1.05	7,755	1.15
1941	8,305	1.21	6,368	0.93
1942	12,003	1.72	7,618	1.09
1943	15,385	2.19	10,012	1.43
1944	18,969	2.70	12,312	1.75
1945	25,711	3.65	15,634	2.22
1946	43,163	6.09	29,829	4.21
1947	48,501	6.81	60,254	8.47
1948	37,919	5.28	43,698	6.08
1949	35,191	4.87	34,856	4.82
1950	29,729	4.09	30,870	4.24
1951	38,382	5.23	28,767	3.92
1952	34,567	4.69	33,922	4.60
1953	30,542	4.14	30,326	4.11
1954	29,036	3.93	28,027	3.79
1955	28,314	3.83	26,816	3.62
1956	28,426	3.83	26,265	3.54
1957	27,858	3.74	23,785	3.19
1958	26,239	3.52	22,654	3.04
1959	26,327	3.52	24,286	3.25

\*Annual average.

Diagram 3



Divorce petitions filed and decrees absolute granted, per 1,000 married women aged 20-49, 1931 to 1959, England and Wales

The Matrimonial Causes Act of 1857 first made civil divorce available without a private Act of Parliament, but the rise in the numbers of divorces was not disproportionate to the increase in the population until the First World War. After the disturbance caused by the First World War there was a slow rise in divorce until the extension of the permissible grounds for divorce under the Matrimonial Causes Act of 1937. The effect of this Act is shown by the rise in the rate of petitioning in 1938 and in decrees absolute granted in 1939 and 1940. The Second World War led to a sharp and sustained rise in petitioning and the granting of decrees absolute from 1942 until 1947. The fall in the rates of petitioning and the granting of decrees absolute from the peak of 1947 appears to have been checked by the enactment of the Legal Aid and Advice Act of 1949 which increased the financial assistance to litigants. The effect of this Act shows up in the rise in petitions in 1951 (the Act came into operation on 2nd October 1950) and in decrees absolute granted in 1952. The disturbance occasioned by this Act seems to have worked itself out by 1954 and since then the rates for both petitions and decrees absolute granted have tended to fall slowly, although the figures for petitions and still more for decrees absolute granted show a rise in 1959 compared with 1958. This apparent rise in 1959 may be partly due to the depression of the figures for 1958 by the operation of the Matrimonial Causes (Decree Absolute) General Order, 1957, which applied to petitions filed on or after 30th April 1957 and which increased the normal interval between the granting of a decree *nisi* and the making of it absolute from six weeks to three months. The apparent rise of the figures for 1959 may only mark a return to the slowly declining trend of recent years.

In 1959 the rate of petitioning per 1,000 married women aged 20-49 was 10 per cent below the rate for 1954 and the corresponding rate for decrees absolute granted was 14 per cent lower than in 1954. This decline must be set in perspective against the great upheaval in the level of divorce rates during and after the Second World War which is clearly shown in Diagram 3.

The relationship between the numbers of petitions filed and the numbers of decrees absolute granted in any single calendar year varies according to changes in the interval between the granting of a decree *nisi* and the making of this decree absolute and also according to the accumulation of business in the courts, but over the period between 1954 and 1959 it appears that nine out of ten of the petitions filed for dissolution of marriage have resulted in a decree absolute being granted and seven or eight out of every ten petitions for the annulment of marriage have resulted in the granting of a decree absolute.

#### Parties to whom and grounds on which decrees granted

Table P1 in Part II shows figures of the decrees made absolute in 1959 classified by the party to whom the decree was granted and the grounds on which it was granted.

Among the 24,286 decrees absolute granted in 1959, 449 were for annulment of marriage of which 53 per cent were granted to the husband. The remainder were decrees for dissolution of marriage of which 45 per cent were granted to the husband. There were 84 cases where the decree of dissolution was granted to both parties.

Table XXI shows for 1959 the distribution of grounds on which decrees absolute were granted according to the party to whom the decree absolute was granted. The entries in this table amount to more than the total number of decrees because of the granting of decrees on more than one ground and also the granting of a decree to both parties. Section (ii) shows the distribution of each ground by the party to whom the decree was granted and Section (iii) shows the proportion of the decrees granted to each party in which each ground was mentioned (either alone or with one or more other grounds).

Table XXI. Grounds on which decrees absolute were granted, by party, 1959, England and Wales

Party to whom decree absolute granted	Ground						Total
	Adultery	Desertion	Cruelty	Lunacy	Presumed dead	Others	
(i) Numbers							
Husband	6,431	4,395	350	85	23	1	11,285
Wife	5,844	4,754	3,476	55	27	19	14,175
(ii) Distribution per 1,000 of each ground by party							
Husband	524	480	91	607	460	50	443
Wife	476	520	909	393	540	950	557
(iii) Distribution per 1,000 total grounds for each party, by ground							
Husband	570	389	31	8	2	—	1,000
Wife	412	336	245	4	2	1	1,000



Adultery was the most frequent ground, irrespective of whether the decree was granted to the husband or the wife. Among decrees in which adultery was mentioned as a ground, 52 per cent were granted to the husband. Desertion is the second most frequent ground and 52 per cent of the decrees where desertion was a ground were granted to the wife. Cruelty is the third common ground but it occurred mainly in decrees granted to the wife (nine out of ten decrees where cruelty was mentioned in 1959 were granted to the wife). These three main grounds accounted for 99 per cent of all the grounds mentioned in decrees absolute granted in 1959.

#### Present ages of parties

Dissolutions and annulments by age of husband and wife at the date of the decree absolute are shown in Table P2 of Part II with rates per 1,000 married men or women in that age-group. These rates are reproduced in table XXII with comparable figures for years since 1950.

**Table XXII. Divorce rates per 1,000 married persons by age at divorce, 1950 to 1959, England and Wales**

Year	Age at date of decree absolute								
	All ages	Under 25	25-	30-	35-	40-	45-	50-	60 and over
Husbands									
1950	2.8	2.5	5.7	5.3	4.4	3.3	2.3	1.3	0.3
1951	2.6	2.0	4.8	5.0	4.2	3.2	2.3	1.3	0.3
1952	3.0	2.1	5.3	5.7	4.8	3.8	2.8	1.7	0.4
1953	2.7	2.2	4.8	5.0	4.3	3.4	2.6	1.4	0.4
1954	2.5	2.1	4.3	4.4	4.1	3.2	2.3	1.4	0.3
1955	2.4	2.0	4.2	4.4	3.7	3.0	2.3	1.3	0.3
1956	2.3	1.9	4.1	4.2	3.5	3.0	2.3	1.3	0.3
1957	2.1	1.1	3.6	3.7	3.3	2.6	2.2	1.3	0.3
1958	1.9	1.0	3.3	3.5	3.1	2.6	2.0	1.2	0.3
1959	2.1	1.1	3.6	3.9	3.2	2.9	2.1	1.3	0.3
Wives									
1950	2.8	3.3	6.2	5.1	3.8	2.8	2.1	0.9	0.2
1951	2.6	2.9	5.3	4.8	3.6	2.8	1.9	1.0	0.2
1952	3.0	3.3	6.1	5.3	4.3	3.3	2.4	1.2	0.3
1953	2.7	3.2	5.3	4.7	3.9	2.9	2.2	1.1	0.2
1954	2.5	2.9	4.9	4.2	3.7	2.7	2.0	1.0	0.2
1955	2.3	3.0	4.6	4.2	3.2	2.6	2.0	0.9	0.2
1956	2.3	2.9	4.6	4.0	3.2	2.6	1.9	0.9	0.2
1957	2.0	2.0	4.1	3.6	2.9	2.3	1.8	0.9	0.2
1958	1.9	2.0	3.8	3.3	2.8	2.3	1.7	0.9	0.2
1959	2.1	2.1	4.1	3.7	2.9	2.5	1.8	1.0	0.2

The slightly younger age distribution of wives compared with husbands at the time of the divorce is reflected in the age rates shown in Table XXII. This

feature derives from the younger marriage age distribution of wives. Just over half the divorced husbands and wives were between 25 and 40 years old.

The increase in decrees absolute granted in 1959 compared with 1958 appears to have affected all age-groups. In comparing divorce rates by age since 1950 it appears that the fluctuations have been greater at the younger ages for both husbands and wives. In 1959 the divorce rate for husbands under 25 years of age was 44 per cent, and that for the 25-29 age-group 63 per cent, of the corresponding rates in 1950, while the rates for husbands aged over 40 were only 12 per cent less than the corresponding rates in 1950. A similar though less well marked gradient with age is visible in a comparison of age specific divorce rates of wives between the two years.

#### Duration of marriage and marriage age of wife

Table P4 in Part II shows the numbers of decrees absolute granted during 1959, classified by duration of marriage and the marriage age of the wife. Divorce rates per thousand married women are also shown where the wife was under the age of 50 at the date of the decree, these being the only ages where estimates of the numbers of married women are available. An extract from the rates section of Table P4 is reproduced in Table XXIII.

**Table XXIII. Dissolutions and annulments of marriage made absolute, by duration of marriage and marriage age of wife. Rates per 1,000 married women, 1959, England and Wales**

Age of wife at marriage	Duration of marriage (completed years)															
	0-2	3	4	5	6	7	8	9	10	11	12	13	14	15-19	20-24	25-29
Under 20	0.3	3.7	8.5	8.3	9.0	8.1	7.3	6.8	7.3	7.3	6.4	5.8	5.0	4.3	3.9	2.8
20-	0.2	1.9	4.3	4.2	4.0	4.1	3.8	3.6	3.5	3.8	3.3	3.1	3.0	2.5	2.0	
25-	0.3	1.6	3.4	3.2	3.0	2.9	3.0	3.0	3.1	2.5	2.2	2.2	2.1	1.6		
30-	0.4	2.1	3.4	2.7	2.1	3.0	3.2	3.5	2.8	3.2	2.8	2.0	2.3			
35-	0.3	1.8	3.6	2.6	3.0	2.4	2.9	3.0	3.6	1.9	2.2					
40-44	0.4	1.3	3.1	2.3	1.8	2.3										

In general, age at marriage exerts a greater influence on divorce rates than current age. The rates in Table XXIII show a regular progression; they fall with increasing age at marriage and also with increasing duration of marriage (normally a petition for divorce may not be filed within three years of the date of the marriage). Table XXIII shows that divorce rates tend to be highest when the marriage has been in existence between four and eleven years, and then to decline steadily with increasing marriage duration. At durations 4 to 11 the divorce rates for marriages where the wife was aged under 20 at marriage were from three and a half to over four times higher than the rate for all married women (2.1 per thousand) and for this marriage age-group the rates at all durations shown are about twice as high as the rates for marriages where the wife was aged 20-24 at marriage. Even at duration 20-24 the rate for the under 20 marriage age-group was 3.9 per thousand.

If the rates in Table P4 were to be maintained indefinitely, ignoring the effect of mortality, the following statement shows the numbers of marriages which at certain durations would have been dissolved out of a thousand marriages contracted at each of the marriage age-groups shown.

Age of wife at marriage	Duration in years			
	5	10	15	20
Under 20	13	51	81	101
20-24	7	26	42	54
25-29	6	21	33	41
30-34	7	21	34	—
35-39	6	20	—	—

This statement illustrates again the higher risk of divorce of those marriages where the wife was aged less than 20 at the time of the marriage. It should be noted, however, that to combine these probabilities of divorce in this way is not a reliable guide to the future long-term prospects. These probabilities are analogous to life table probabilities in referring to the experience in a single calendar year of different cohorts. When sufficient data have been accumulated it will be possible to compare the experience of different cohorts at equal marriage durations and this should produce a more satisfactory guide to long-term prospects.

#### Marriage age of husband and wife in combination

Marriages dissolved and annulled during 1959 are classified in Table P3 of Part II by the marriage ages of husband and wife in combination. The absence of a cross classification by year of marriage prevents the calculation of wholly satisfactory divorce rates per thousand related marriages. A full cross classification was published in 1957 and will be repeated at intervals. Table XXIV is designed to indicate, if only approximately, the differentials involved. The denominators of the rates on which this table is based are the marriages which took place from 1925 to 1955 classified by age at marriage. Rates obtained by dividing the divorces of 1959 by denominators so obtained will exceed rates based on the number of surviving marriages (the correct exposed to risk) by the proportion by which the original marriages exceed those still in existence. Table XXIV shows the ratios of rates for the various combinations of marriage age to the rate for all marriage ages combined.

**Table XXIV. Ratio of divorce rates per 1,000 related marriages, by marriage ages of husband and wife in combination, to rate for all marriage ages combined, 1959, England and Wales**

Age of wife at marriage	Age of husband at marriage					
	All ages	Under 20	20-	25-	30-	35 and over
Persons married in the years 1925-1955						
All ages	100	260	134	82	71	52
Under 20	219	287	211	201	223	300
20-	105	210	115	87	94	126
25-	63	292	92	54	54	74
30-	60	—	129	63	51	57
35 and over	41	—	167	82	71	34

The main feature demonstrated by Table XXIV is the increased likelihood of divorce for younger age at marriage. This was true for both husbands and wives separately, the effect of a younger age at marriage being slightly more marked for husbands. There is a general tendency for the likelihood of divorce to be lowest when the two age-groups at marriage are the same and to increase on either side of this point, rising higher at the younger age of the other party. This effect results from the interplay of two factors; increasing likelihood of divorce for low age at marriage and also for widening difference in marriage age.

#### Previous marital condition by marriage age

The decrees made absolute during 1959 are analysed in Table P6 according to the previous marital condition of both parties in combination, cross classified by the age of the wife at the time of the marriage. In the 1957 Commentary this topic was discussed more fully with the aid of a further cross-classification by year of marriage which permitted the calculation of satisfactory rates based on the numbers of original marriages. The general picture shown for 1959 differs little from that of 1957 when it was shown that the likelihood of divorce tended to be lowest for first marriages, highest for marriages where the partners had been divorced previously, with those marriages where the partners had been widowed in an intermediate position.

#### Children of the marriage

Table P5 in Part II shows the dissolutions and annulments of marriage during 1959 according to the number of surviving children of the marriage. These children are the children alive at the date of the petition irrespective of their age and, as well as children of the dissolved marriage, may also include children legitimated by that marriage and any adopted children.

The total number of children involved in the 24,286 dissolutions and annulments in 1959 was 31,677, an average of 1.3 children per couple. The average number of children per couple fell steadily from 1.7 for those decrees where the wife was aged under 20 at marriage to 0.5 for the 35-39 marriage age-group and to 0.2 where the wife was aged 45 or over at marriage.

**Table XXV. Percentage distribution of marriages dissolved or annulled, by number of children, 1959, England and Wales**

Age of wife at marriage	Number of children					
	Total	0	1	2	3	4 and over
All ages	100	33	30	21	9	7
Under 20	100	21	32	26	12	9
20-	100	32	30	22	9	7
25-	100	43	30	18	6	3
30-	100	55	26	12	5	2
35 and over	100	79	13	5	2	1

Table XXV shows the distribution of marriages dissolved or annulled during 1959 classified by the age of the wife at marriage according to the number

of children of the marriage. This table shows that among all such marriages a third were childless, 30 per cent had one child, another 30 per cent had two or three children and only seven per cent had four or more children. The proportion of childless marriages rises from just over a fifth where the wife was aged under 20 at marriage to nearly four fifths where the wife was 35 or over at the time of the marriage. The proportion of childless married women under 50 enumerated in the 1951 Census was 12 per cent in the under 20 marriage age-group, rising to 51 per cent for those married at age 35 and over. Allowing for the differences in the two sets of data, this suggests that divorce rates for childless couples may be about twice as high as the average for the marriage age-group concerned.

## WIDOWHOOD

Table SS of Part II shows the number of marriages ended by the death of one partner, classified by the ages of the deceased and surviving partners. This table, however, is deficient in respect of those deceased persons about whose marital condition no statement was supplied when the death was registered. The incidence of this occurrence as a percentage of all deaths in 1959 is set out below for men and women separately:

### Percentage of deaths where marital condition was not stated

Age at death	Men	Women
15-	10.2	0.75
20-	34.1	1.07
25-	25.0	0.43
30-	19.7	0.072
35-	13.0	0.24
40-	9.4	0.12
45-	6.9	0.088
50-	4.9	0.092
55-	3.7	0.048
60-	3.1	0.050
65-	2.7	0.058
70-	2.5	0.060
75 and over	2.3	0.034
All ages	3.5	0.053

The "not stated" percentage is low for female deaths at all ages. The marital condition of deceased females could always be inferred from the former Rank or Profession (now Occupation) column of the death registers. For male deaths the "not stated" percentage is substantial, particularly at younger ages. The marital condition of deceased males is normally obtained under the Population (Statistics) Act, 1938, but this Act does not apply in the case of deaths registered on a coroner's certificate after an inquest—since the beginning of 1961 coroners have been asked to supply the information when it is available to them. This accounts for the general scale of omission of marital condition for males. Male deaths by accident, poisoning or violence, which normally involve an inquest, amounted in 1959 to:

62 per cent of all deaths of males aged 20-24  
 47 " " " " " " " " " " 25-29  
 34 " " " " " " " " " " 30-34  
 23 " " " " " " " " " " 35-39

A rateable distribution of the "not stated" may lead to some bias in that such persons are likely to be single and to be concentrated in the younger ages, but the amount of such a bias will be small particularly in relation to the "not stated" elements consequent on registration on a coroner's certificate. It is possible that the rates per thousand married women in Table XXVI are slightly over estimated.

**Table XXVI. Widowhood rates, 1955 to 1959, England and Wales**

1955	1956	1957	1958	1959	Age of surviving spouse	1955	1956	1957	1958	1959	
Deaths of wives per 1,000 married men					15 and over	Deaths of husbands per 1,000 married women					
6.9	6.8	6.8	6.7	6.7		13.9	14.0	14.0	14.1	14.0	
0.5	0.5	0.4	0.4	0.4		15-	0.8	0.8	0.9	0.8	0.8
0.6	0.6	0.6	0.6	0.6		25-	1.1	1.1	1.1	1.0	1.0
0.9	0.8	0.8	0.7	0.7		30-	1.6	1.6	1.5	1.5	1.5
1.2	1.2	1.3	1.2	1.1		35-	2.7	2.7	2.6	2.6	2.6
1.8	1.8	1.9	1.8	1.7		40-	4.5	4.5	4.6	4.6	4.5
3.0	2.9	2.9	2.8	2.7		45-	7.9	7.7	7.9	7.7	7.7
4.8	4.5	4.6	4.4	4.3		50-	13.6	13.1	13.2	13.0	13.0
7.4	7.4	7.5	7.1	7.2		55-	21.6	22.0	21.9	21.5	21.4
12.0	11.8	11.5	11.4	11.2		60-	33.0	33.3	33.0	33.1	32.3
19.1	19.0	18.3	18.3	18.2		65-	49.3	49.8	49.9	49.9	49.0
30.7	30.4	29.4	29.4	28.7		70-	70.9	72.3	69.8	72.0	70.9
57.8	59.2	56.0	57.3	56.5		75 and over	113.3	111.9	105.9	110.7	109.0

Table XXVI relates to the calendar years 1955 to 1959 inclusive. These widowhood rates differ from ordinary death rates in being based on a selected population which excludes those persons whose health has not permitted them to marry. Moreover, the deaths which generate these rates do not occur at the specified ages but at ages distributed around a mean that is a little older than that of the married women whose husbands die (and conversely a little younger than that of the married men whose wives die). This difference is caused by the age differential at marriage. Nevertheless, the rates given in Table XXVI reflect the main variations in mortality rates by sex and age and also the scale of annual changes. After allowance has been made for the above age differences, the death rates of husbands per thousand married women are higher in every single age-group than, and in general persist at about twice the rate for, wives per thousand married men. The proportion of married women who are left widows between 50 and 60 is about three times that of married men who become widowers in their fifties.

The general level of the widowhood rates is of much more importance than the small differentials within their main structure. The chance that a married woman aged 25 will become a widow before she is 45 is about twice the chance that she will be dead at that age. Nevertheless, perhaps the outstanding points demonstrated by Table XXVI are that the current level of mortality at ages under 45 is so low that widowhood is not seriously depleting the younger married population and further that death is of comparatively low incidence among married women in the reproductive age-groups.

**BIRTHS**

**Live births**

The number of live births which occurred in England and Wales in 1959, 748,501, was the highest since 1948; it was 1.1 per cent higher than in 1958. This compares with increases of 3.3 per cent and 2.4 per cent between 1956 and 1957 and 1957 and 1958 respectively. The birth rate per 1,000 population was maintained at the level reached in 1958 which was itself the highest since 1949. The numbers of births since the 1851-60 period classified by legitimacy are shown in Table XXVII.

**Table XXVII. Live births and birth rates by legitimacy, 1851 to 1959, England and Wales**

Period	Number of live births	Live birth rate per 1,000 population	All live births per 1,000 women aged 15-44	Legitimate live births	Legitimate live births per 1,000 married women aged 15-44	Illegitimate live births	Illegitimate live births per 1,000 unmarried women aged 15-44
1	2	3	4	5	6	7	8
1851-1860	6,471,650	34.1	144.9	6,048,479	281.0	423,171	18.3
1861-1870	7,500,096	35.2	151.0	7,043,090	287.3	457,006	18.2
1871-1880	8,588,782	35.4	153.6	8,161,584	295.5	427,198	15.1
1881-1890	8,890,238	32.4	138.7	8,471,116	274.6	419,122	12.6
1891-1900	9,155,153	29.9	122.7	8,773,351	250.3	381,802	9.6
1901-1910	9,298,209	27.2	109.0	8,927,791	221.6	370,418	8.2
1911-1920	8,096,222	21.8	87.7	7,706,457	173.5	389,765	8.1
1921-1930	7,129,070	18.3	73.9	6,818,295	143.6	310,775	6.3
1931-1935	3,022,864	15.0	61.7	2,891,469	115.2	131,395	5.5
1936-1940	3,041,652	14.7	60.9	2,913,834	107.3	127,818	5.6
1941-1945	3,346,343	15.9	69.3	3,116,516	105.4	229,827	11.4
1946-1950	3,904,666	18.0	80.9	3,690,413	122.5	214,253	11.7
1951-1955	3,377,098	15.2	72.5	3,216,521	105.0	160,577	10.1
1956	700,335	15.6	77.0	666,801	108.2	33,534	11.4
1957	723,381	16.1	80.0	688,819	111.5	34,562	12.1
1958	740,715	16.4	82.1	704,541	113.9	36,174	12.8
1959	748,501	16.4	83.0	710,340	114.7	38,161	13.5

The birth rate per 1,000 population does not permit a true appreciation of fertility trends and, as a first step to a more illuminating analysis, births may be related to the number of women of childbearing age (conventionally taken as 15-44) instead of to the total population and, as a further step, the legitimate and illegitimate births may be related to the married and unmarried women respectively in the 15-44 age range; rates of both these forms are shown in columns 4, 6 and 8 respectively of Table XXVII.

In 1959 the birth rate per 1,000 women aged 15-44 showed a further increase; this was in contrast to the lack of change in the crude birth rate which was depressed by the slight fall in the proportion of women aged 15-44 in the population. The legitimate birth rate in 1959 was 7 per cent above the rate for 1936-40 although the number of legitimate live births in 1959 was 22 per cent higher than the average annual number for that period, the difference being due to the larger proportion of women in this age range who are now married.

Conversely, while the illegitimate birth rate in 1959 was 2.4 times the rate for 1936-40 the number of illegitimate births was only 1.5 times as many, this difference being due to the smaller number of unmarried women now in this age-group.

#### Incomplete statement at birth registration

The birth statistics now under consideration are obtained by the analysis of the information given at birth registration. These annual statistics are slightly incomplete due to an occasional failure to obtain a record of the mother's age, duration of marriage, or number of previous children. The proportion of "not stated" cases of various types is shown in Table QQ for women married once only. For all types of information combined this proportion amounted to one half per cent in 1959. As no severe bias is expected in this small number of cases they have been distributed proportionately among the "stated" in Tables AA, HH, II, LL, and MM as it is considered that most users will find this form of presentation more convenient.

#### Birth occurrences and registration time lag

The statutory period allowed for registration of either a live birth or a still-birth is 42 days and there has generally been an appreciable time lag between the occurrence of a birth and its registration. In the past the time lag was found to decrease markedly after the introduction of an incentive to register earlier, for example, by the dependence of the issue of Family Allowances upon birth registration. Conversely, registration has become more tardy whenever the incentives have been removed or have become less compelling. In 1959 the average time lag between the occurrence and the registration of a birth was about thirteen days.

The importance of time lags from the statistical aspect is their influence on the difference between the number of births registered in a period and the number occurring in the same period. Occurrences are usually the more appropriate statistics for the measurement of fertility, but figures for registrations are available sooner. The difference between the two is influenced by the time lag in two ways. A difference will occur, even though the time lag be constant, if birth incidence is changing; and also, even though the birth incidence be constant, if the time lag is changing. In practice both factors operate. The combined effect of these factors may be measured by the ratio of occurrences to registrations, which in 1959 was 0.9975.

#### Tabulation basis

Fertility tabulations may be made on the basis of either live births or maternities, and which is more convenient depends upon the use to which the tabulations are put. The tables in Part II distinguish so many characteristics that it is neither practical nor economic to provide completely parallel classifications of births and maternities. Full analyses by legitimacy and mother's age are given for both live births and maternities (Tables AA to FF and TT), but the legitimate fertility tabulations by duration of marriage or number of previous children are restricted to maternities (Tables HH, II, KK, LL, MM and QQ). The legitimate fertility rates by age of mother and year and duration

of marriage (Table OO) were in terms of maternities until 1955 but since 1956 they have been converted to a live birth basis by ratios of the kind shown in Table XXVIII. Table PP (mean family size by year of marriage) has always related to live births.

Maternities are slightly greater in number than live births as the stillbirths included in the former exceed the multiple births excluded. The excess is small and the maternity statistics can be converted to live birth figures with enough accuracy for most purposes by means of the appropriate ratios which are shown for 1959 in Table XXVIII.

Table XXVIII<sup>1</sup>. Ratio of legitimate live births to legitimate maternities by age of mother at maternity, 1959, England and Wales

Age of mother at maternity						
All ages	Under 20	20-	25-	30-	35-	40 and over
0.991	0.989	0.992	0.994	0.993	0.986	0.967

The tables distinguishing duration of marriage or numbers of previous children (Tables HH to QQ) are confined to women married once only. Comparable statistics for women married more than once and for all married women, both classified by duration of *current* marriage, relating to 1952, were published in the 1955 Commentary where ratios comparing the three sets of fertility rates were also given (pages 30-33).

#### Illegitimate births and pre-marital conceptions

Among the 755,294 maternities which occurred in 1959, 5.1 per cent (38,792) were illegitimate. Tables B and C in Part II and Table XXVII contain serial records of illegitimate births since 1851. Numbers of illegitimate maternities since 1938 are shown in column 2 of Table XXIX and column 3 shows the numbers of pre-maritally conceived legitimate maternities. The number of pre-maritally conceived legitimate maternities has been taken as approximately equivalent to those at marriage durations under 9 months (8½ months before 1952). The combined proportion of extra-maritally conceived maternities is shown in column 5; at about one eighth it has been slightly lower in recent years than in 1938-39.

Table XXIX. Illegitimate maternities and pre-maritally conceived legitimate maternities, 1938 to 1959, England and Wales

Year	Illegitimate maternities	Pre-maritally conceived legitimate maternities*	Total maternities conceived extra-maritally*		Percentage of extra-maritally conceived maternities legitimated by marriage of parents before birth of child
			Numbers	Percentage of all maternities	
1	2	3	4	5	6
1938	27,440	64,530	91,970	14.4	70.2
1939	26,569	60,346	86,915	13.8	69.4
1940-1944†	39,542	43,146	82,688	12.4	52.2
1945-1949†	49,466	52,557	102,023	13.0	51.5
1950	35,816	54,188	90,004	12.8	60.2
1951	33,444	50,477	83,921	12.3	60.1
1952	33,088	50,740	83,828	12.3	60.5
1953	33,083	50,266	83,349	12.1	60.3
1954	32,128	50,901	83,029	12.2	61.3
1955	31,649	50,638	82,287	12.2	61.5
1956	34,113	54,895	89,008	12.6	61.7
1957	35,098	56,203	91,301	12.5	61.6
1958	36,787	56,581	93,368	12.5	60.6
1959	38,792	57,638	96,430	12.8	59.8

\*From 1952 onwards the figures relate to women married *once only*.

†Annual averages.

Legitimate maternities at these short durations and illegitimate maternities can usefully be considered together as they both relate to mothers who were unmarried at the time of conception. During and immediately after the Second World War the numbers of illegitimate maternities and pre-maritally conceived legitimate maternities tended to move in opposite directions, leaving the total number of extra-maritally conceived maternities relatively stable. This feature has been less well marked in recent years but is still true for the period since 1938 taken as a whole.

In Table XXX the extra-maritally conceived maternities have been related to the population at risk of producing such maternities. This is the average number of unmarried women between the beginning of April in the stated year and the same date of the previous year. As an approximation, the number of unmarried women at the end of September of the previous year has been estimated and used as the exposed to risk. These women have, however, been classified by their age at maternity in the usual way.

Table XXX. Extra-maritally conceived maternities per 1,000 unmarried women at risk (see text), 1938 and 1952 to 1959, England and Wales

Age of mother	1938	1952-54 average	1955	1956	1957	1958	1959
15-	11.8	15.5	16.5	19.0	20.2	21.2	21.7
20-	32.6	42.5	44.0	48.6	50.3	52.2	54.2
25-	24.5	37.3	39.5	42.2	45.4	47.4	50.5
30-	15.1	30.7	30.8	34.3	36.8	37.9	40.8
35-	10.4	18.0	18.6	20.4	21.9	22.0	22.1
40-	4.3	6.1	6.5	6.8	7.1	7.3	7.9
15-44	18.6	25.3	26.1	28.9	30.3	31.4	32.5
Ratio to 1938							
Crude	1.00	1.36	1.40	1.55	1.63	1.69	1.75
Standardised by age	1.00	1.41	1.47	1.63	1.71	1.78	1.84

The rates for all extra-maritally conceived maternities are highest for women aged 20-24 followed by those in the 25-29 age-group. The separate age rates for illegitimate maternities and pre-maritally conceived legitimate maternities in 1959 are shown in the following statement:

Group of maternities	Age at maternity					
	Under 20	20-	25-	30-	35-	40-44
Illegitimate	5.78	16.72	28.14	29.45	17.10	6.41
Pre-maritally conceived legitimate	15.89	37.46	22.40	11.33	5.00	1.51

The rates for the pre-maritally conceived legitimate maternities rise to a sharp peak in the 20-24 age-group and then decline rapidly with age. The rates for illegitimate births on the other hand rise and fall more gradually with a lower maximum between 25 and 34 and by the 40-44 age-group the rate is more than four times that of the pre-maritally conceived legitimate maternities.

The rates for all extra-maritally conceived maternities are well above the pre-war level, a rise which has not been paralleled in the total numbers of such births; the fall in the proportion of unmarried persons in the younger age-groups of the population being responsible for the rise in the rates.

If the incidence of pre-marital conceptions is measured conventionally by the legitimate maternity rate for durations under 9 months, Table KK shows that the incidence is highest at ages under 20 where the maternity rate for the first 9 months is as high as for the remaining quarter of the first year. This rate then falls steeply to the 20-24 age-group and more slowly thereafter.

A more detailed discussion of this topic appeared on pages 19-21 of the 1955 Commentary.

Legitimate births and fertility

Age of mother and duration of marriage

The total number of legitimate births and the corresponding rates per 1,000 married women aged 15-44 irrespective of age of mother and duration of marriage were shown in Table XXVII. As fertility declines with advancing age of mother and lengthening duration of marriage, these factors must be taken into account, for a proper assessment.

Among the legitimate maternities which occurred in England and Wales in 1959, 5 per cent were to mothers aged under 20, 62 per cent were to mothers aged between 20 and 30, 30 per cent to mothers aged between 30 and 40 and 3 per cent to mothers aged 40 and over. The distribution in five year age-groups is shown in the following statement:

Legitimate maternities in each age-group per 1,000 legitimate maternities at all ages	Age of mother at maternity							
	All ages	Under 20	20-24	25-29	30-34	35-39	40-44	45 and over
	1,000	54	305	317	194	104	24	2

A similar distribution of legitimate maternities in England and Wales during 1959 by duration of marriage shows that 56 per cent of all legitimate maternities in 1959 were to mothers whose marriage had lasted less than 5 years (13 per cent of legitimate maternities were to mothers who had been married for less than a year) and 84 per cent to mothers married for less than 10 years.

Legitimate maternities at each duration per 1,000 legitimate maternities at all durations	Marriage duration in completed years									
	All durations	0	1	2	3	4	5-9	10-14	15-19	20+
	1,000	134	122	112	102	90	280	112	39	9

In Table II the legitimate maternities to women married once only are classified by both age of mother at maternity and the duration of her marriage. Using the mean numbers exposed to risk by current age and marriage duration published in Table JJ, corresponding rates by current age and duration of marriage have been computed and published in Table KK. The rates shown in Table KK are summarised for recent years in Table XXXI which shows in general the typical pattern of decline with increasing age, as well as with each year of duration after the first. The apparent exception at the longest durations within some of the lines, mainly that for the age-group under 20, is due to the fact that as it approaches the right-hand edge of the table the group becomes confined to fewer single years of age, corresponding to the very youngest marriage ages. In this part of a detailed table by single years of age, fertility rates change more rapidly with marriage age than with duration, and the number of women at the individual ages making up the group increases very quickly with age.

Table XXXI. Legitimate maternity rates for women married once only by age and marriage duration, 1952 to 1959, England and Wales\*

Ages of married women at maternity	Year	Marriage duration (completed years)										
		All durations	0-	1-	2-	3-	4-	5-9	10-14	15-19	20-24	25 and over
All ages under 50	1952-55	.088	.280	.260	.222	.203	.180	.115	.048	.019	.006	.001
	1956	.092	.292	.267	.230	.215	.192	.122	.051	.020	.006	.001
	1957	.094	.300	.274	.237	.220	.201	.127	.053	.021	.006	.001
	1958	.096	.308	.279	.245	.227	.207	.131	.054	.021	.005	.001
	1959	.097	.312	.281	.252	.229	.207	.132	.054	.021	.006	.001
Under 20	1952-55	.415	.460	.323	.339	.354	—	—	—	—	—	—
	1956	.406	.454	.314	.315	.333	—	—	—	—	—	—
	1957	.408	.453	.329	.317	.356	—	—	—	—	—	—
	1958	.415	.465	.332	.317	.324	—	—	—	—	—	—
	1959	.416	.468	.330	.331	.342	—	—	—	—	—	—
20-24	1952-55	.253	.272	.278	.246	.237	.222	.205	—	—	—	—
	1956	.259	.277	.283	.250	.245	.229	.217	—	—	—	—
	1957	.263	.281	.288	.254	.248	.234	.218	—	—	—	—
	1958	.267	.286	.291	.263	.250	.239	.218	—	—	—	—
	1959	.267	.288	.292	.269	.251	.232	.213	—	—	—	—
25-29	1952-55	.171	.237	.246	.216	.203	.187	.141	.111	—	—	—
	1956	.180	.247	.255	.226	.216	.199	.152	.113	—	—	—
	1957	.186	.265	.259	.235	.222	.211	.157	.118	—	—	—
	1958	.189	.270	.266	.239	.229	.215	.160	.118	—	—	—
	1959	.188	.270	.268	.248	.230	.217	.159	.121	—	—	—
30-34	1952-55	.099	.230	.238	.199	.181	.164	.107	.068	.069	—	—
	1956	.100	.247	.245	.210	.190	.173	.110	.066	.063	—	—
	1957	.103	.257	.255	.218	.192	.180	.114	.069	.062	—	—
	1958	.104	.253	.260	.224	.209	.186	.118	.071	.060	—	—
	1959	.105	.256	.268	.228	.209	.189	.119	.072	.061	—	—
35-39	1952-55	.049	.167	.183	.148	.133	.124	.079	.042	.035	.041	—
	1956	.050	.175	.195	.152	.144	.132	.082	.045	.035	.035	—
	1957	.051	.184	.200	.158	.144	.130	.085	.046	.035	.036	—
	1958	.050	.179	.193	.165	.145	.130	.084	.046	.035	.035	—
	1959	.049	.188	.207	.170	.150	.135	.084	.046	.033	.033	—
40-44	1952-55	.015	.054	.065	.053	.049	.042	.029	.017	.012	.011	.010
	1956	.014	.054	.075	.059	.049	.042	.030	.017	.012	.010	.008
	1957	.014	.067	.068	.056	.048	.044	.031	.018	.012	.010	.008
	1958	.013	.054	.071	.058	.049	.042	.030	.018	.012	.009	.008
	1959	.013	.067	.074	.059	.057	.046	.031	.017	.011	.009	.007
45-49	1952-55	.001	.004	.003	.004	.003	.003	.002	.002	.001	.001	.001
	1956	.001	.003	.004	.005	.003	.002	.002	.001	.001	.001	.001
	1957	.001	.001	.004	.003	.003	.002	.002	.002	.001	.001	.001
	1958	.001	.005	.003	.004	.005	.003	.002	.002	.001	.001	.001
	1959	.001	.004	.004	.006	.005	.004	.003	.002	.001	.001	.001

\* In calculating these rates the few maternities to women whose stated age and marriage duration implied an age at marriage below the legal minimum of 16 have been excluded.

Table XXXI indicates that between 1958 and 1959 there was in general a rise in maternity rates for all ages under 45 except at some of the longer durations within each age-group. Although the number of maternities involved was relatively small the rates show a proportionately greater rise for those mothers aged over 30 at short marriage durations.

Cohort analysis

An alternative classification of legitimate maternities by age at marriage and year of marriage is given in Table MM (which also shows the number of previous liveborn children); the mean numbers exposed to risk are shown in Table NN and the corresponding rates have been computed and published in Table OO having been converted from maternity rates to live birth or fertility rates. Tables NN and OO relate to the integral duration intervals which ended in 1958-59; e.g. duration 2 completed years covers the interval from the second wedding anniversary (falling in 1958) to the third anniversary (falling in 1959).

A proper appreciation of fertility trends needs more than the examination of such annual fertility rates. It is necessary to take a group of people, such as those married in a particular period, and to follow them through their reproductive lives, either by detailed records or by statistical computation which will approximate to the same results. Such a group is generally called a *cohort*, and the study of fertility records in this form, *cohort analysis*. In this country the term *cohort* is reserved for those who married in the same time interval and those born in the same period are referred to as a *generation*. Cohort analysis can help to avoid the misleading impression which may be made by the births of any one period such as a year when either family size or the timing of births is changing.

Tables of mean family sizes and fertility rates for women married once only have been computed for each marriage cohort since 1920 and appear in Appendix A (pages 240-251). The mean family size tables (Tables 1 (a) to 1 (g)) show the average number of liveborn children after each single year of marriage duration separately for each age at marriage group. The set of fertility rate tables (Tables 2 (a) to 2 (g)) show the average annual increments by which the mean family size has been built up. The two sets of tables have been produced each year by using the lines of Tables OO and PP as diagonal additions to data produced by linking data from the 1946 Sample Family Census of the Royal Commission on Population, the 1951 Census of England and Wales and the annual vital registration records.\*

The tables in Appendix A show completed family sizes for marriage cohorts from 1920 to 1929 and these figures are repeated in Table XXXII with figures for earlier cohorts taken from the data obtained at the 1911 Census of England and Wales and the 1946 Family Census.

\*For the technical problems involved and the methods used see *Census 1951, England and Wales: Fertility Report*, Chapter IV, Appendix I. H.M.S.O., 1959, price £4 10s. 0d. net.

Table XXXII. Mean ultimate family size of marriage cohorts since 1861, all marriage ages under 45, England and Wales

Calendar year of marriage	Mean ultimate family size (actual)	Calendar year of marriage	Mean ultimate family size (actual)	Calendar year of marriage	Mean ultimate family size projected using fertility rates for	
					1951-55	1958-59
1861-69	6.16	1910	2.95	1930	2.09	2.09
		1911	2.83	1931	2.08	2.08
1871	5.94	1912	2.80	1932	2.08	2.08
		1913	2.81	1933	2.06	2.06
1876	5.62	1914	2.73	1934	2.04	2.04
1881	5.27	1915	2.43	1935	2.04	2.04
		1916	2.43	1936	2.01	2.01
1886	4.81	1917	2.44	1937	2.03	2.02
		1918	2.45	1938	2.06	2.06
1890-99	4.13	1919	2.57	1939	2.05	2.04
1900-09	3.30	1920	2.47	1940	2.00	1.99
		1921	2.38	1941	2.04	2.03
		1922	2.28	1942	2.08	2.07
		1923	2.23	1943	2.14	2.13
		1924	2.21	1944	2.18	2.17
		1925	2.17	1945	2.18	2.16
		1926	2.14	1946	2.19	2.17
		1927	2.09	1947	2.20	2.19
		1928	2.08	1948	2.21	2.20
		1929	2.08	1949	2.21	2.21
				1950	2.30	2.30
				1951	2.20	2.22
				1952	2.22	2.26
				1953	2.24	2.31
				1954	2.24	2.32

The women married since 1930 have not yet all completed their childbearing and to estimate their mean ultimate family size, projections have been made from the position reached in 1959. The first projection shown in Table XXXII assumes that future fertility rates by marriage age and duration will be equal to the mean of those experienced in 1951-55; the second uses similar rates equal to the mean of those experienced in 1958-59. The 1958-59 figures when compared with the 1951-55 figures are lower for marriage cohorts before 1949 and higher for more recent cohorts. This reflects the differences in the two sets of duration fertility rates as illustrated by the 20-24 age-group shown below.



Sums of fertility rates

Marriage age 20-24

Duration of marriage (completed years)	Mean 1951-55	1958-59	Difference
All durations	2.175	2.379	+0.204
Before marriage	0.033†	0.033†	(—)
0-4	1.132	1.238	+0.106
5-9	0.596	0.691	+0.095
10-14	0.273	0.285	+0.012
15-19	0.114	0.112	-0.002
20 and over	0.027	0.020	-0.007

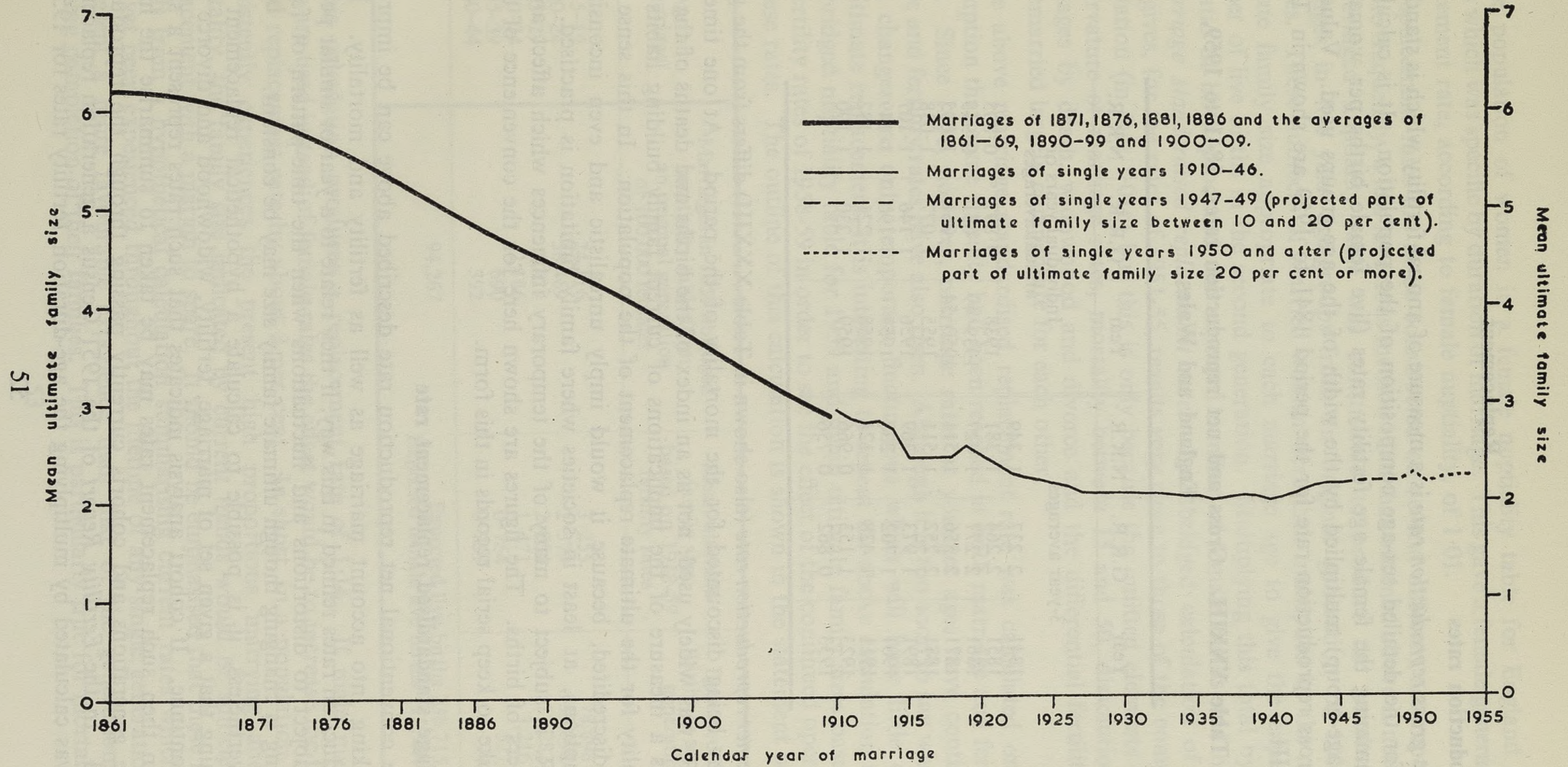
†Assumed equal to marriages of 1945.

For the 20-24 age-group the 1958-59 rates are higher than the 1951-55 rates at durations under 15, but are slightly lower for the longer marriage durations. The element of projection (though not of course the margin of error) amounts to between 10 and 20 per cent of the total for marriages of 1947-49 and to 20 per cent or more for marriages since then, the figures gradually becoming more speculative. Whichever assumption is used the projected mean ultimate family sizes are unlikely to be appreciably in error for marriages of 1944 or earlier. The present increased flow of births has not been established long enough to say whether there is an upward trend in family size or whether this flow merely reflects a change, which may well be temporary, in the timing of births within marriage.

It is necessary to bear in mind that the rise in ultimate family size for the most recent cohorts may be a product of the method of projection which implicitly assumes, by the use of current fertility rates for all durations, that the rates at longer durations will be unaffected by the high fertility at short durations.

Diagram 4 shows the mean ultimate family size of marriage cohorts since 1861, using the assumptions based on 1951-55 fertility rates for the recent cohorts.

Diagram 4



Mean ultimate family size of marriage cohorts since 1861, all marriage ages under 45, England and Wales

## Replacement

### Reproduction rates

The *gross reproduction rate* is a measure of annual fertility which is standardised for the detailed sex-age composition of the population. It is calculated by summing the female age fertility rates (live female births per woman in each age-group) multiplied by the width of the age-groups used. Values of the gross reproduction rate for the period 1841 to 1959 are shown in Table XXXIII.

**Table XXXIII. Gross and net reproduction rates, 1841 to 1959, England and Wales**

Year	G.R.R.	N.R.R.	Year	G.R.R.	N.R.R.
3-year averages			Individual years or annual averages		
1841	2.237	1.349	1938	0.897	0.805
1851	2.264	1.381	1939-49	1.031	0.945
1861	2.277	1.427	1950-54	1.061	1.015
1871	2.356	1.511	1955	1.077	1.038
1881	2.252	1.511	1956	1.146	1.107
1891	1.973	1.369	1957	1.190	1.149
1901	1.702	1.238	1958	1.221	1.182
1911	1.428	1.121	1959	1.230	1.190
1923	1.153	0.966			
1933	0.862	0.756			

The *net reproduction rate* (also shown in Table XXXIII) differs from the gross rate by being discounted for the mortality of the period. At one time the N.R.R. was widely used, not as an index of the births and deaths of the year but as a measure of the implications of current family building habits and mortality for the ultimate replacement of the population. In this sense it is now discredited, because it would imply unrealistic and even inconsistent assumptions, at least in societies where family limitation is practised. The N.R.R. is subject to many of the temporary influences which affect annual numbers of births. The figures are shown here for the convenience of those who like to keep serial records in this form.

### Marriage standardised replacement rate

The conventional net reproduction rate described above can be improved by taking into account marriage as well as fertility and mortality. Even reproduction rates refined in this way, if they relate to a year or similar period, are subject to distortions and fluctuations when the time-pattern of family building is changing though ultimate family size may be constant.

Nevertheless, it is possible to calculate a hypothetical replacement rate assuming that a given set of marriage, fertility, widowhood and divorce rates will continue. If cohort analysis indicates that such rates represent a stable pattern then such replacement rates may be taken to summarise the habits of the generations and cohorts currently passing through the reproductive period. In the *Fertility Report* of the 1951 Census a generation replacement rate was calculated by multiplying the age-duration fertility rates for 1951-55

by the population of women in a female nuptiality table for England and Wales which was specific by duration of marriage. This gave a female generation replacement rate, according to female nuptiality, of 1.01.

If replacement rates are to be constructed on several different assumptions or more frequently, a less laborious method than that outlined above is needed. An abridged nuptiality table was constructed to produce the number of marriages in five year age-groups from an original generation of 100,000 females. These numbers of married women were then multiplied by the mean ultimate family size appropriate to each marriage age to give the expected number of live births in the second generation. Multiplying this total by the sex ratio at birth produced the expected number of female births and hence a *marriage standardised replacement rate*. An abridged calculation of this kind gives, for the rates of 1951-55, results very close to those of the complete calculation (in fact 1.016) but this is only because the omitted elements such as curvature of marriage rates, mortality between 15 and 50, dissolution of marriages by death, widowhood and divorce and the differential fertility of the remarried largely compensate for each other.

The above marriage standardised replacement rate was calculated on the assumption that some stability had been reached in both marriage and fertility rates. Since 1956, however, marriage rates at younger ages have continued to rise and fertility rates have also risen. Although it is too soon to say whether these changes are only temporary fluctuations which will have little effect on ultimate replacement, it is interesting to repeat the above calculation using an abridged nuptiality table for 1959 and mean ultimate family sizes based on the fertility rates of 1958-59 in order to see the effect of the continued operation of these rates. The outline of this calculation is shown in the statement below.

Age at marriage	Marriages in 1959 abridged nuptiality table from an original generation of 100,000 females	Mean ultimate family size based on 1958-59 fertility rates	Expected live births in second generation
15-19	24,116	3.255	78,498
20-24	58,469	2.379	139,098
25-29	8,414	2.054	17,282
30-34	2,186	1.471	3,216
35-39	690	0.764	527
40-44	392	0.239	94
	94,267	Expected live births 238,715 Expected female live births 115,944	

This calculation produces a replacement rate of 1.16. If male marriage rates are used instead of female rates the effect would be to increase the female based replacement rate by about 3 per cent. In short, in a population which consistently experiences the present high proportions marrying and low mortality, the family size indicated by current trends would be sufficient for replacement with a margin to spare. It should be emphasised that these figures result from a hypothetical calculation summarising current rates which have not yet been experienced throughout the lifetime of any single generation and represent a more favourable experience than that of the generations now nearing completion of their families. This is particularly true for mortality.

### Generation replacement rates

The replacement rate of actual generations since 1838-43 were shown and discussed in the 1956 Commentary (pages 23-24). The number of female births to the 1838-43 generation of women, the last before the spread of family limitation, was about 40 per cent above replacement level. Then followed a decline in the replacement rate until, with the 1903-08 generation, it was 30 per cent short of the number needed for replacement. Since then the rate has been rising and, if present trends continue, will reach replacement with the generation born in 1943-48 or a little earlier if marriage rates continue above the 1951-55 level.

The rate of the rise has been slowing down and there are no clear indications at present that it will carry the rate very much higher. The greater part of the recovery in the level of the replacement rates since the 1903-08 generation has been due to improved mortality (mainly in infancy) and higher marriage rates, and in both these respects there is now limited scope for further improvement.

### Birth order

The legitimate maternities of the year to women married once only are tabulated by birth order as well as mother's age at maternity in Table HH. In 1959, 39 per cent were first births, 31 per cent second, 15 per cent third and 15 per cent fourth or later births, a distribution which differs little from that of earlier years. In Table LL the first maternities among these are further subdivided by duration of marriage.

Table MM gives a threefold classification by mother's age at marriage, duration of marriage and birth order and makes it possible to investigate the share of births of different orders in the recent rise in fertility rates. True birth order rates would relate, say, the second maternities of mothers married in 1953 at age 20-24 to the estimated number of women in that group who have so far had one child. It has not so far been possible to carry out the considerable work of making a series of such estimates in line with those of mean family size in the 1955 Commentary. In the meantime a series of rates has been computed relating the live births\* of each calendar year from 1952 to 1959, classified by birth order, to all the married women of the same marriage year and marriage age as the mothers concerned. In effect the marriage age/cohort rates of Table OO (style of 1952-55, but live births) have been subdivided by birth order in proportion to Table MM. The rates for 1959 are shown in Appendix B on pages 252-253. The rates for all ages under 45 combined are means of the age rates weighted by the original number of spinster marriages in each cohort and age-group and index numbers of these all-ages rates are shown in Table XXXIV for durations up to 15 and for duration 20. Figures are not shown for 1953-56 which follow the pattern established by the figures shown in Table XXXIV, but figures for these years appeared in the 1957 Commentary, pages 21-23.

\*Maternities converted by the appropriate coefficients.

Table XXXIV. Ratios of fertility rates by birth order (live births per woman married once only, irrespective of parity) to those of 1952 taken as 100: 1952 and 1957 to 1959, England and Wales

All marriage ages under 45

Mean marriage duration (years)	Calendar year of marriage	Calendar year of maternity	Number of previous children					
			Total	0	1	2	3	4 and over
½	1952	1952	100			100		
	1957	1957	110			110		
	1958	1958	117			117		
	1959	1959	116			116		
1	1951	1952	100	100		100		
	1956	1957	109	108		128		
	1957	1958	110	108		138		
	1958	1959	111	109		146		
2	1950	1952	100	100	100		100	
	1955	1957	102	98	111		98	
	1956	1958	106	98	120		117	
	1957	1959	106	96	124		122	
3	1949	1952	100	100	100		100	
	1954	1957	109	110	111		100	
	1955	1958	112	109	117		106	
	1956	1959	117	110	124		116	
4	1948	1952	100	100	100	100		100
	1953	1957	114	123	113	107		98
	1954	1958	117	119	117	115		101
	1955	1959	115	113	117	116		107
5	1947	1952	100	100	100	100		100
	1952	1957	117	140	114	107		107
	1953	1958	121	142	118	114		112
	1954	1959	124	140	119	121		121
6	1946	1952	100	100	100	100	100	100
	1951	1957	117	156	116	106	98	101
	1952	1958	120	155	118	111	106	111
	1953	1959	120	154	118	112	110	108
7	1945	1952	100	100	100	100	100	100
	1950	1957	125	159	119	115	120	141
	1951	1958	119	157	115	111	112	129
	1952	1959	121	156	113	115	117	132
8	1944	1952	100	100	100	100	100	100
	1949	1957	114	154	110	105	111	123
	1950	1958	127	173	124	117	126	130
	1951	1959	120	171	115	112	115	121
9	1943	1952	100	100	100	100	100	100
	1948	1957	111	131	104	104	108	131
	1949	1958	112	135	105	103	110	131
	1950	1959	123	145	116	115	121	144

Table XXXIV—continued

Mean marriage duration (years)	Calendar year of marriage	Calendar year of maternity	Number of previous children					
			Total	0	1	2	3	4 and over
10	1942	1952	100	100	100	100	100	100
	1947	1957	105	111	91	96	113	141
	1948	1958	109	121	96	102	118	136
	1949	1959	109	124	92	101	116	147
11	1941	1952	100	100	100	100	100	100
	1946	1957	103	89	83	97	112	139
	1947	1958	107	100	89	101	115	140
	1948	1959	108	112	89	101	113	144
12	1940	1952	100	100		100	100	100
	1945	1957	105	87		99	109	135
	1946	1958	105	85		97	113	142
	1947	1959	108	88		100	114	145
13	1939	1952	100	100		100	100	100
	1944	1957	106	97		102	107	119
	1945	1958	104	96		101	107	111
	1946	1959	106	95		101	104	124
14	1938	1952	100	100		100	100	100
	1943	1957	115	113		124	118	109
	1944	1958	114	105		123	120	110
	1945	1959	113	109		116	116	112
15	1937	1952	100	100		100	100	100
	1942	1957	116	131		130	120	99
	1943	1958	117	118		129	120	109
	1944	1959	117	110		124	123	113
20	1932	1952	100			100		
	1937	1957	83			83		
	1938	1958	87			87		
	1939	1959	97			97		

When the births are so finely subdivided there are bound to be many small numbers subject to chance fluctuations and in Table XXXIV births of different orders have therefore been grouped together in such a way that the corresponding cells in Table MM contain at least 1,000 maternities. Even so there are quite a few cells where no significance can be attached to very small movements in the index numbers.

Table XXXIV shows that the rise in births in 1959 compared with 1958 affected most durations up to 20 years. The pattern of changes between these years in birth orders is rather irregular but there appears to be a tendency for the ratios for higher orders at a given duration to rise more than the lower birth order ratios.

Over the period shown in Table XXXIV the first and fifth and higher order birth rates have risen more than the rates for second and third births at

durations 4 to 8. This effect may be partly due to the peculiar structure of these rates in 1952 when the first order rates were depressed because the women married in the period just after the Second World War had their first children more quickly after marriage than later cohorts. By duration 5 or 6 their rates in Appendix B would be smaller than those of following cohorts because there were fewer at risk of having a first child. In the same way fourth and higher order births would be proportionately under-represented among the total births of 1952 because few of the women married in the period just after the Second World War would be having births of these orders by 1952 to which year the birth rates of subsequent years have been related.

Sex ratio at birth

In 1959 there were 1,063 male live births per 1,000 female live births. Serial records are published in Table C of Part II and separate figures for live and still births by legitimacy are shown in Table XXXV. The generally rising trend in proportion of boys during this century can be attributed to the reduction in foetal mortality in this period.

Table XXXV. Male births per 1,000 female births, by legitimacy and whether live or still, 1928 to 1959, England and Wales

Period	Legitimate births			Illegitimate births		
	Live	Still	Live and still	Live	Still	Live and still
1928-30	1,044	1,231	1,051	1,037	1,280	1,049
1931-35	1,051	1,207	1,057	1,044	1,153	1,049
1936-40	1,054	1,183	1,059	1,050	1,117	1,054
1941-45	1,061	1,158	1,064	1,074	1,173	1,078
1946-50	1,061	1,169	1,063	1,056	1,238	1,061
1951-55	1,059	1,126	1,060	1,061	1,229	1,066
1956	1,057	1,108	1,058	1,055	1,049	1,055
1957	1,061	1,081	1,061	1,049	1,002	1,047
1958	1,059	1,083	1,060	1,055	1,164	1,058
1959	1,063	1,071	1,063	1,069	1,144	1,071

Table XXXVI. Male live births per 1,000 female live births, by maternal age, 1955-59, England and Wales

(Legitimate and illegitimate combined)

Male births per 1,000 female	Maternal age								
	Under 20	20-	25-	30-	35-	40-	45 and over	Not stated	All ages
	1,067±4	1,067±2	1,058±2	1,056±2	1,054±3	1,046±6	1,054±25	1,043±24	1,060±1

Table XXXVI shows the sex ratio of liveborn children by age of mother at maternity for the 1955-59 period. There is some decrease in the proportion of boys with increase in mother's age, although the progression is irregular. This is partly due to the higher proportion of stillbirths for older mothers, the stillbirth rate being higher for boys than for girls. Some clarification is

therefore possible if live births and stillbirths are combined and this has been done in Table XXXVII which also distinguishes the legitimate births from the illegitimate.

**Table XXXVII. Male births per 1,000 female births by maternal age and legitimacy for liveborn and stillborn children combined, 1955-59, England and Wales.**

Maternal age	Legitimate	Illegitimate
Under 20	1,067 ± 5	1,060 ± 11
20-	1,067 ± 2	1,066 ± 9
25-	1,058 ± 2	1,065 ± 10
30-	1,058 ± 2	1,052 ± 12
35-	1,056 ± 3	1,058 ± 15
40-	1,054 ± 6	999 ± 25
45 and over	1,059 ± 24	1,076 ± 90
Not stated	1,049 ± 24	973 ± 60
<b>All ages</b>	<b>1,061 ± 1</b>	<b>1,059 ± 5</b>

In the legitimate section of Table XXXVII the relationship with increasing age of mother is still present but the range between the younger and the older ages has been reduced by the inclusion of stillbirths in these figures. The fundamental biological ratio is that of males to females at conception and the ratio at birth differs from it not only on account of the stillbirths but also by the effect of losses in the earlier period of pregnancy, i.e. before the twenty-eighth week of pregnancy for which no data are available.

Over the 1955-59 period there is no significant difference between the sex ratios for legitimate and illegitimate births.

#### Multiple births

Among the 755,294 maternities in 1959 there were 9,021 with multiple births, 8,934 with twins and 87 with triplets. They produced 17,359 liveborn children and 770 stillborn children. Thus one in 85 of all maternities produced twins and one in 8,700 produced triplets. Details are given in Tables CC and DD.

The number of multiple maternities in a single year is too small for detailed study; the figures would be too much affected by chance fluctuations. A detailed analysis, combining figures for several years, appeared in the 1956 Commentary, pages 33-42.

#### Stillbirths

The registration of stillbirths in England and Wales began on 1st July 1927, when the Births and Deaths Registration Act, 1926, came into operation. Numbers of stillbirths are published in Part II for England and Wales as a whole by quarters (Table D) and by sex and legitimacy (Table B); Table E gives the total numbers for all county districts. Under the Population (Statistics) Act, 1938, additional information has been collected at the registration of births, including stillbirths, and detailed tabulations of stillbirths by legitimacy and age of mother appear in Table AA.

The stillbirth rate has fallen from 38.1 per 1,000 total births in 1939 to 21.5 per 1,000 in 1958 and 20.8 in 1959. The effects of multiple maternities, age of mother and birth order were amply discussed in the Civil Text for 1946-50 (pages 141-144) where it was shown that the risk is much higher in multiple than in single births especially at the younger ages of mother where the single birth risks are lower; is higher in male than in female births; increases with age of mother except at the youngest ages; and independently of age varies with parity, being highest at first births and lower at the second than at any higher parity.

The seasonal incidence of stillbirths is discussed on pages 59-60. Tables and commentary relating to medical aspects are on pages 71ff, 90ff, and 210ff.

#### Seasonal incidence of births

Table XXXVIII shows the quarterly pattern of live births since the 1841-50 decade measured in terms of the ratio of the average number of births per day for each quarter compared with the average daily figure for the whole year. The daily average has been used for both quarters and, below, for months to allow for differences in the length of quarters and months.

**Table XXXVIII. Quarterly incidence of live births in relation to the average for the calendar year: ratio of quarterly daily average to that of the calendar year taken as 100: 1841 to 1959, England and Wales**

Period	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1841-1850	105	103	96	96
1851-1860	105	104	96	95
1861-1870	104	103	97	96
1871-1880	103	102	98	97
1881-1890	103	102	98	97
1891-1900	102	102	99	97
1901-1910	102	103	100	95
1911-1920	103	102	99	96
1921-1930	102	105	100	93
1931-1935	101	106	101	92
1936-1940	100	106	102	92
1941-1945	100	104	99	97
1946-1950	103	104	99	94
1951-1955	103	105	99	93
1956	102	103	100	95
1957	100	104	99	97
1958	104	102	97	97
1959	105	104	98	93

There has been little change in the seasonal pattern over the period shown in Table XXXVIII. The first half of the year has normally accounted for a few per cent more than the average daily births for the whole year and the second half of the year for correspondingly less. Since the beginning of this century the average daily number of births has usually been highest in the second quarter of the year and lowest in the last quarter. In this respect both 1958 and 1959 have been unusual in having the highest average daily births in the

first quarter (as was usually the case between 1841 and 1900). The figure for the second quarter of 1958 was depressed by the temporary decline in the summer of 1958 and the process of making up this decline appears to have increased the births in the last quarter of 1958 and the first quarter of 1959 to a level slightly above their recent position relative to the other quarters of their respective years.

The quarterly incidence of births for recent years distinguishing legitimate and illegitimate live births and also legitimate stillbirths is shown in Table XXXIX. This table demonstrates that the quarterly pattern is similar for legitimate and illegitimate live births; the wider quarterly variation which had been noticed for illegitimate births has not been apparent for the most recent years.

**Table XXXIX. Quarterly birth incidence in relation to the average for the calendar year: ratio of quarterly daily average to that of the calendar year taken as 100: 1939, 1951-55, 1958 and 1959, England and Wales**

Period	1939	1951-55 average	1958	1959
All live births				
1st Quarter	101	103	104	105
2nd "	107	105	102	104
3rd "	100	99	97	98
4th "	92	93	97	93
Legitimate live births				
1st Quarter	101	103	104	105
2nd "	106	105	102	104
3rd "	100	99	97	98
4th "	93	93	97	93
Illegitimate live births				
1st Quarter	106	104	103	103
2nd "	108	107	101	104
3rd "	99	98	97	99
4th "	87	91	99	94
Legitimate stillbirths				
1st Quarter	106	106	105	107
2nd "	104	103	100	105
3rd "	97	95	97	97
4th "	93	96	98	91

The seasonal variation in the number of stillbirths is the product of two factors, the variation of births and the variation in stillbirth rates. The first of these has much the greater influence, but operates something like a month in advance because the average period of gestation is shorter for stillbirths than for live births. Hence the distribution resembles that of live births, but anticipates it slightly with the result that the first quarter usually has the largest numbers.

The monthly birth figures in Table TT allow a more detailed study. The ratios of the daily averages in each month to those for the calendar year are contained in Table XL for some recent years.

**Table XL. Monthly birth incidence in relation to the average for the calendar year, 1939, 1951-55, 1958 and 1959, England and Wales**

Month of occurrence	Ratio of monthly daily average to that of the calendar year taken as 1,000											
	Legitimate live births				Illegitimate live births				Legitimate stillbirths			
	1939	1951-55	1958	1959	1939	1951-55	1958	1959	1939	1951-55	1958	1959
January	980	994	1,001	1,013	1,076	998	998	1,024	1,043	1,044	1,043	1,047
February	995	1,030	1,029	1,053	1,041	1,049	1,045	1,029	1,045	1,064	1,067	1,091
March	1,041	1,063	1,089	1,077	1,080	1,074	1,058	1,050	1,078	1,079	1,046	1,094
April	1,073	1,056	1,051	1,056	1,046	1,078	1,008	1,039	1,068	1,064	1,074	1,133
May	1,078	1,065	1,041	1,050	1,138	1,084	1,054	1,056	1,060	1,032	952	1,054
June	1,043	1,035	980	1,014	1,044	1,056	974	1,013	1,002	988	966	970
July	1,025	1,009	940	1,001	1,038	1,020	901	1,017	984	968	918	995
August	985	968	951	960	960	941	948	981	972	946	971	975
September	1,004	991	1,006	990	969	970	1,068	981	963	946	1,029	929
October	939	936	975	959	859	890	976	916	938	941	923	879
November	914	913	958	902	853	900	995	914	932	966	1,002	933
December	927	941	981	928	889	950	983	974	917	980	1,019	914

For live births Table XL shows that the daily average is normally at a minimum in November, rises sharply until March, remains high until May or June and then declines again except for a minor rise in September (corresponding to December conceptions).

The daily average of live births was exceptionally low in June, July and August of 1958. This effect may well have been associated with the epidemic of Asian influenza which occurred in the autumn of 1957. As already noted the ratios for the last three months of 1958 and January and February of 1959 were higher than normal but the ratios for the later months of 1959 indicate a return to the usual seasonal pattern.

Stillbirths tend to be relatively numerous in January to May and relatively rare in July to December, corresponding approximately to the distribution of live births about a month later. The stillbirth ratios fluctuate more from one year to another than those of live births, mainly because of the smaller numbers involved. The seasonal variation in stillbirth rates is shown by Table XLI, which relates the average daily number of stillbirths in each calendar month to the sum of that number and of the corresponding number of live births one month later.

Table XLI. Stillbirth rates by calendar month (see text) 1939, 1951-55, 1958 and 1959, England and Wales

The ratios were calculated before rounding off the rates

Month of occurrence of stillbirth	Rate per 1,000 total births (live and still)				Ratio of rate to calendar year taken as 1,000			
	1939	1951-55	1958	1959	1939	1951-55	1958	1959
Year	38.1	22.9	21.5	20.8	1,000	1,000	1,000	1,000
January	39.9	23.2	21.6	20.8	1,045	1,011	1,006	998
February	38.0	22.9	20.9	20.9	998	996	974	1,005
March	38.0	23.4	21.4	21.7	998	1,021	997	1,040
April	38.0	22.9	22.2	22.2	997	999	1,036	1,066
May	38.6	22.8	21.0	21.6	1,013	995	977	1,038
June	37.1	22.6	21.9	20.3	973	983	1,018	974
July	38.2	23.1	20.9	21.6	1,002	1,005	974	1,036
August	36.7	21.9	20.7	20.5	962	956	966	983
September	39.5	23.2	22.5	20.2	1,036	1,010	1,050	970
October	39.0	23.5	21.0	20.3	1,023	1,023	978	976
November	38.4	23.4	22.1	20.7	1,007	1,019	1,031	992
December	36.3	22.6	21.5	19.1	953	984	999	914

Stillbirth rates calculated on something like the true exposed to risk vary little with the seasons, hardly more than they do by chance as a result of small numbers. The seasonal variation is, however, statistically significant when the numbers are increased by combining the five years 1951-55 ( $\chi^2 = 27.1$  with 11 degrees of freedom;  $P(\chi^2 = 24.7) = .01$ ). The numbers in the individual years shown, including 1939, are too small to show significant seasonal variation. In the 1951-55 period the rates tended to be highest in October and lowest in August.

The seasonal pattern of ratios to the calendar year average such as those shown in Table XL is disturbed if the trend of births is not constant. Such distortion can be eliminated by relating the average daily number of births for the month, not to the average for the year, but to the trend value for that particular month. This comparison has been made for the period since 1956 and the results are shown in Table XLII and illustrated in Diagram 5.

Table XLII. Monthly incidence of legitimate live births in relation to the trend 1956 to 1959, England and Wales

The ratios were calculated before rounding off the mean numbers

Month of occurrence	Mean numbers of legitimate births per day								Ratio of actual to trend value			
	Actual				Trend							
	1956	1957	1958	1959	1956	1957	1958	1959	1956	1957	1958	1959
January	1,802	1,841	1,933	1,972	1,797	1,844	1,914	1,946	1.003	0.998	1.010	1.013
February	1,851	1,941	1,987	2,050	1,803	1,852	1,917	1,948	1.027	1.048	1.036	1.052
March	1,968	1,990	2,103	2,095	1,810	1,861	1,920	1,951	1.088	1.069	1.095	1.074
April	1,941	1,971	2,028	2,055	1,816	1,870	1,923	1,953	1.069	1.054	1.055	1.052
May	1,899	1,991	2,010	2,044	1,821	1,880	1,926	1,955	1.043	1.059	1.043	1.046
June	1,845	1,935	1,891	1,974	1,824	1,890	1,930	1,958	1.011	1.024	0.980	1.008
July	1,830	1,840	1,815	1,949	1,826	1,897	1,933	1,960	1.002	0.970	0.939	0.994
August	1,764	1,819	1,835	1,868	1,828	1,901	1,935	1,961	0.965	0.957	0.948	0.953
September	1,826	1,904	1,942	1,927	1,829	1,904	1,937	1,963	0.999	1.000	1.003	0.982
October	1,717	1,861	1,883	1,866	1,831	1,908	1,939	1,965	0.938	0.975	0.971	0.950
November	1,677	1,758	1,848	1,755	1,834	1,910	1,941	1,967	0.915	0.920	0.952	0.892
December	1,742	1,802	1,893	1,807	1,838	1,912	1,944	1,969	0.948	0.942	0.974	0.918

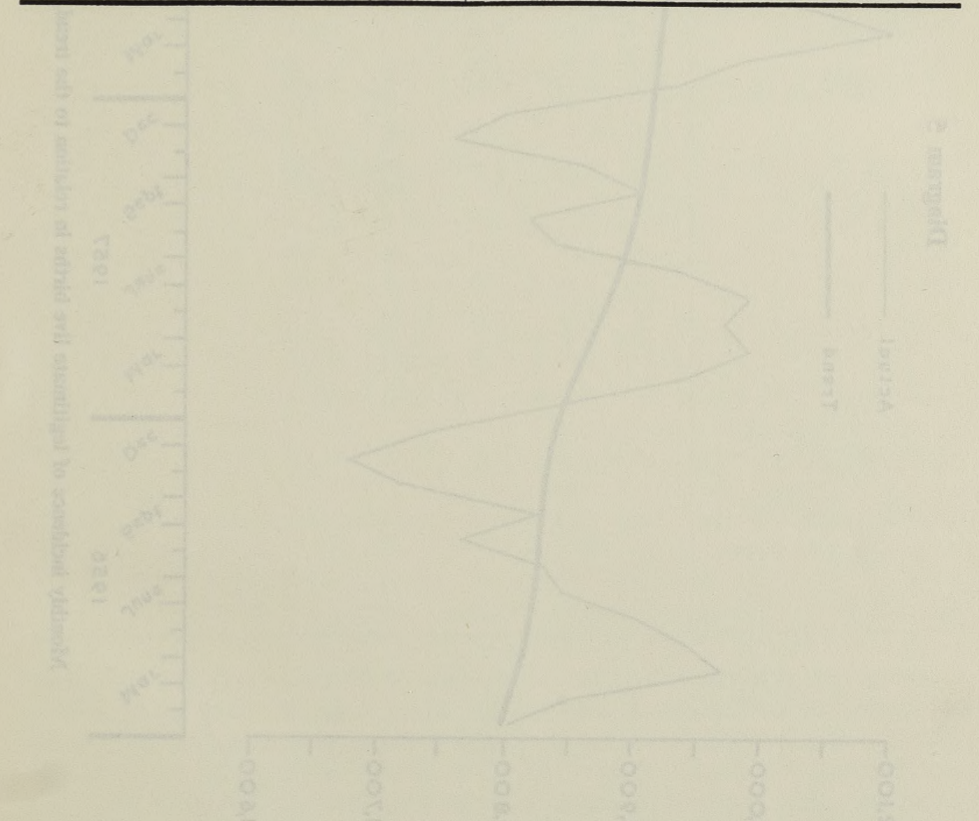
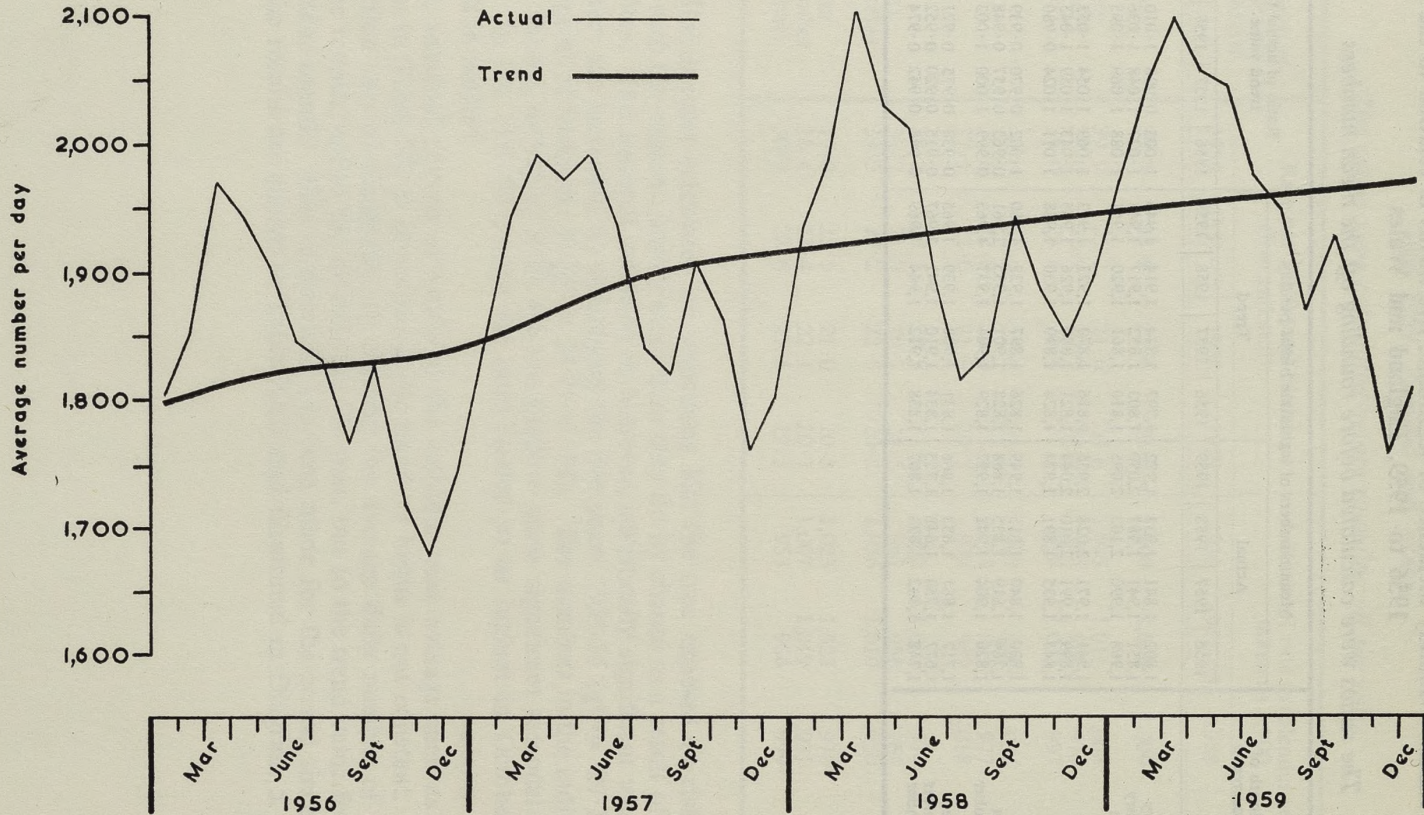




Diagram 5



Monthly incidence of legitimate live births in relation to the trend, 1956 to 1959, England and Wales

When seasonal variation has been eliminated it can be seen that there was an upward trend throughout the whole of this period. The trend rose slowly throughout 1959.

### Birth rates in different parts of the country

The numbers of live births by sex and legitimacy and the crude birth rates for all administrative areas in England and Wales with summary figures for regions, conurbations and urban/rural aggregates are shown in Table E of Part II. This table also includes an Area Comparability Factor for each area by which the crude birth rates can be standardised for the sex and age structure of the local population. The ratio of the local rate thus adjusted to the national birth rate is also published in Table E.

Even rates standardised for sex and age may not be a safe guide to fertility differentials. The Tables in Appendix C for regions, conurbations, remainders of regions and urban/rural aggregates take the analysis a stage further. They give age fertility rates by legitimacy derived from Table BB and the differentials shown by these rates have been summarised in the form of index numbers in Table XLIII.

Table XLIII. Ratios of birth rates in regions, conurbations and urban/rural aggregates to those of England and Wales, 1959

Area	All live births			Legitimate live births		Illegitimate live births	
	Crude	Standardised		Crude	Standardised for sex, age and condition	Crude	Standardised for sex, age and condition
		for sex and age	for sex, age and condition				
1	2	3	4	5	6	7	8
ENGLAND AND WALES ...	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Regions and Conurbations:</b>							
Northern ...	1.11	1.09	1.11	1.12	1.10	0.88	0.89
Tyneside Conurbation ...	1.14	1.07	1.12	1.15	1.11	0.92	0.87
Remainder of Northern ...	1.10	1.09	1.11	1.11	1.10	0.87	0.90
East and West Ridings ...	1.00	1.00	0.96	1.00	0.96	0.96	1.08
West Yorkshire Conurbation ...	0.98	1.00	0.96	0.97	0.97	1.11	1.19
Remainder of East and West Ridings ...	1.02	1.00	0.96	1.02	0.95	0.87	1.00
North Western ...	1.03	1.04	1.07	1.04	1.06	1.00	0.97
South East Lancashire Conurbation ...	1.02	1.03	1.00	1.01	1.01	1.21	1.24
Merseyside Conurbation ...	1.21	1.14	1.23	1.21	1.23	1.07	0.87
Remainder of North Western ...	0.96	1.01	1.04	0.97	1.03	0.76	0.79
North Midland ...	1.03	1.04	0.98	1.03	0.97	1.00	1.18
Midland ...	1.03	0.99	0.98	1.03	0.97	0.99	1.03
West Midlands Conurbation ...	1.04	0.97	0.95	1.03	0.95	1.13	1.13
Remainder of Midland ...	1.02	1.02	1.01	1.03	1.00	0.86	0.92
Eastern ...	1.04	1.06	1.06	1.05	1.05	0.88	0.94
London and South Eastern ...	0.93	0.90	0.91	0.91	0.93	1.21	1.09
Greater London ...	0.94	0.88	0.89	0.91	0.90	1.35	1.16
Remainder of London and South Eastern ...	0.90	0.98	1.01	0.90	1.01	0.85	0.85
Southern ...	1.04	1.10	1.09	1.04	1.09	1.01	1.08
South Western ...	0.94	1.01	1.03	0.95	1.02	0.81	0.85
Wales (inc. Monmouthshire) ...	0.98	0.99	1.02	0.99	1.01	0.70	0.70
Wales I (South East) ...	1.00	0.98	1.00	1.01	0.98	0.65	0.68
Wales II (remainder) ...	0.93	1.00	1.10	0.94	1.09	0.81	0.74
Urban/Rural aggregates:							
Conurbations ...	1.00	0.96	0.96	0.99	0.97	1.23	1.12
<i>Areas outside conurbations:</i>							
Urban areas with populations of 100,000 and over ...	1.01	0.99	0.96	1.00	0.96	1.14	1.20
Urban areas with populations of 50,000 and under 100,000 ...	0.99	0.99	0.98	0.99	0.97	0.98	1.00
Urban areas with populations under 50,000 ...	1.01	1.03	1.03	1.02	1.02	0.79	0.84
Rural districts ...	1.00	1.07	1.09	1.01	1.08	0.73	0.78

Among the conurbations, the remainders of regions, and the complete regions that do not contain a conurbation, which together make up seventeen mutually exclusive areas covering the whole of England and Wales, the highest crude birth rate (column 2) in 1959, as in previous years, was that of the Merseyside Conurbation followed by the Tyneside Conurbation and the remainder of the Northern Region. Standardisation either for sex and age alone (column 3), or for sex, age and marital condition (column 4) does not affect the position of the Merseyside Conurbation but does affect the indices for some of the other areas; standardisation by sex and age alone raises the rate for the Southern Region into second place, while standardisation by sex, age and condition brings the low crude rate for Wales II (which excludes

South East Wales) close to the two parts of the Northern Region. The smallest crude rates occurred in the Remainder of the London and South Eastern Region, Greater London, Wales II and the South Western Region. The effect of standardisation on the figure for Wales II has already been mentioned and standardisation by sex, age and condition entirely removed the deficiency in the Remainder of the London and South Eastern Region, sex and age alone accounting for more than three quarters of it whereas in Greater London standardisation slightly increased the deficiency. Other areas where standardisation made a considerable difference were the Remainder of the East and West Ridings Region (ratio reduced from 1.02 to 0.96), the Remainder of the North Western Region (raised from 0.96 to 1.04), the North Midland Region (reduced from 1.03 to 0.98), the West Midlands Conurbation (reduced from 1.04 to 0.95), and the South Western Region (raised from 0.94 to 1.03).

The peculiar sex-age condition structure of the population made a difference of 0.05 or more to the index in nine of the seventeen mutually exclusive areas in Table XLIII. Standardising by sex and age alone gave an indication of this difference in all areas except the South East Lancashire Conurbation and the North Midland Region; in Greater London the effect of standardisation by sex and age alone was more than that of standardisation by sex, age and condition.

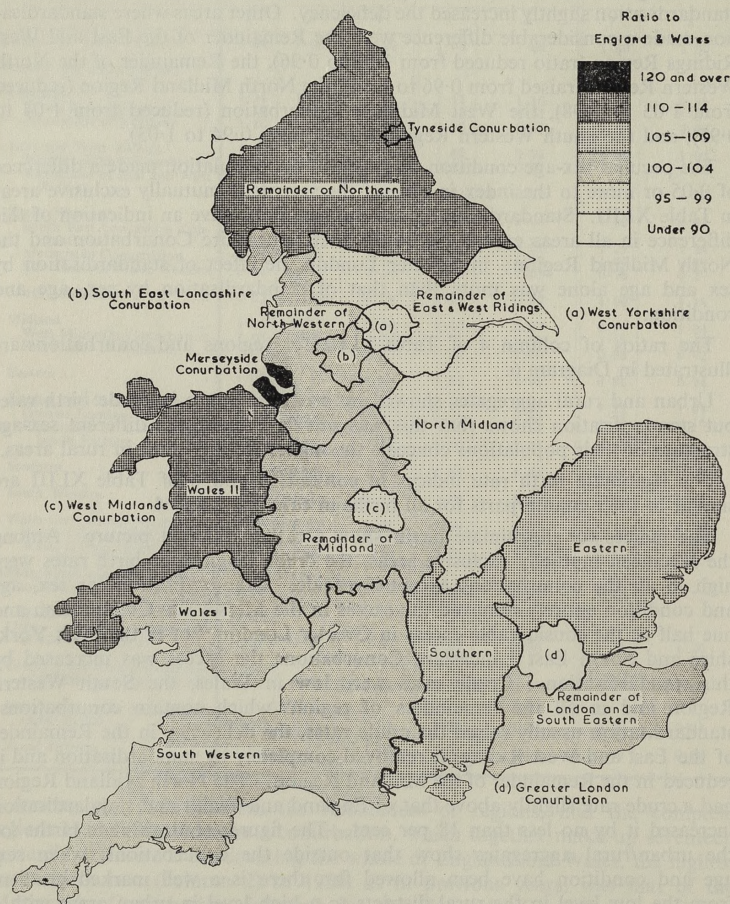
The ratios of column 4 of Table XLIII for regions and conurbations are illustrated in Diagram 6.

Urban and rural aggregates showed no great difference in crude birth rates but standardisation shows that this was merely because the different sex-age structure of their populations conceals the higher fertility rates in rural areas.

The legitimate birth rate indices in columns 5 and 6 of Table XLIII are similar to their counterparts for all births in columns 2 and 4.

The indices for illegitimate births show a rather different picture. Among the seventeen mutually exclusive areas, the crude illegitimate birth rates were high in all the conurbations except Tyneside. Standardisation for sex, age and condition entirely removed the excess in the Merseyside Conurbation and one half of the considerable excess in Greater London, but in the West Yorkshire and South East Lancashire Conurbations the excess was increased by this standardisation. Crude rates were low in Wales, the South Western Region and in all the remainders of regions which contain conurbations; standardisation usually raised the crude rates, the deficiency in the Remainder of the East and West Ridings is removed completely by standardisation and is reduced in the Remainder of the Midland Region. The North Midland Region had a crude rate slightly above that of England and Wales and standardisation increased it by no less than 18 per cent. The figures of illegitimate births for the urban/rural aggregates show that outside the conurbations, when sex, age and condition have been allowed for, there is a well marked gradient from the low level in the rural districts to a high level in urban areas with a population of 100,000 and over, the standardised ratio for these areas being higher than the similar ratio for the conurbations.

Diagram 6



Live birth rates standardised for sex, age and marital condition, conurbations and remainders of regions, 1959, England and Wales

## MORTALITY IN 1959

### Introduction

In these Commentaries it has become very difficult in recent years to discuss mortality statistics for a single year without laying oneself open to the charge of repetition in all but minor detail of what was said for the previous year. From the statistics of the year under review it may be possible to say that this or that rate of mortality continues to decline (or to rise) but for a more detailed analysis, review over a longer period may be indicated.

A change is therefore being made in the nature of these annual Commentaries on mortality statistics. In future, the full range of topics will not always be the subject of individual comment, and chapters will not be repeated every year with contents virtually unchanged. Instead, reviews of particular subjects will be undertaken from time to time in which recent trends will be considered in more detail but over a longer period. They will not necessarily be restricted to mortality data alone. Not unnaturally these reviews will usually consider subjects of topical or general interest but from time to time methodological aspects of vital statistics may also be discussed.

Despite this general change in approach there still remains a place for a brief review of general mortality statistics which may be of some interest to those concerned with the Public Health and which will also have a place as a historical document in showing the particular problems occupying our minds at the present time.

One further point should be made concerning the mortality statistics of the Commentary volume of the *Registrar General's Statistical Review*. In Part I (Medical Tables) in order not to delay production of the tables the computation of rates and ratios has to be kept to a minimum. Also, presentation of the data in their most economical form means that data required for comparison are often not brought together. With the later production of the Commentary volume both these points can be covered to some extent. Thus the tables which in the past formed the basis for detailed commentary will continue to be published, in the main without comment, in the hope that users of the data will find them presented in a more readily usable form. The content of these tables will be reviewed from time to time.

Special subjects considered briefly in this report are (a) mortality by marital status on page 164, and (b) an introduction to mortality from congenital malformations on page 172.

### General mortality

The crude death rate in 1959 was 12.3 per 1,000 population for males (12.4 in 1958) and 11.0 per 1,000 for females (11.0 in 1958). For both sexes the Standardised Mortality Ratio (S.M.R.) fell by one point compared with the previous year, to 94 for males and 89 for females. The experience of 1950-52 for each sex is taken as the standard (100).

There was an outbreak of influenza in the early months of the year which caused the crude death rate for the first quarter of the year to rise to 15.8 per 1,000, the highest for any quarter since the corresponding period in 1953, but well below the high figure of 19.1 reached in the first three months of 1951. The mortality in the succeeding three quarters of the year was on the low side. It is a common finding that after a noticeable outbreak of "influenza" in the first quarter of a year with increased mortality, the death rate in succeeding quarters is low. It is no doubt partly due to the fact that the deaths of the old and weakened, who might have died soon in any case, are hastened by a few months or weeks by influenzal infection. The reverse is also true that a mild and "infection free" winter is often followed by higher death rates.

In considering the death rates by age and sex the increase in the death rate of young men aged 15-24 is most noticeable. This increase was almost entirely accounted for by the larger number of deaths in this group caused by motor vehicle accidents, particularly those causing the deaths of riders or passengers of motorcycles. To tackle this problem one must look to a large extent to fields other than medicine, but a considerable and largely medical problem, although in some ways a less dramatic one, exists at the older end of the age scale where the death rate for men has remained virtually constant for the past two decades. The death rate for women continues to decline slowly. Some of the blame for the stability of the male death rate can be laid on cancer of the lung and coronary artery disease, but it seems unlikely that it lies wholly there because although Morris\* has shown that by excluding these two causes the trends in death rates for males and females are much nearer parallel, few would deny that a very large part of the increase in the numbers of deaths assigned to these causes has been the result of better diagnosis.

Table XLIX on page 79 shows deaths, death rates and S.M.R.s for a selection of the more important causes of death. Among those shown there was a rise in 1959 compared with 1958 in the following causes:

- (a) Cancer of lung—this had the effect of slightly increasing the S.M.R. for males for all malignant neoplasms.
- (b) Leukaemia and aleukaemia. The S.M.R. rose for females only and was due to an abnormally large increase of 134 deaths assigned to this cause. Although the increase was spread over lymphatic, myeloid, and acute leukaemias, in the first two the number of deaths assigned in 1958 were abnormally low and the rise in these types can be attributed to a return to the normal trend line. On the other hand, the increase in deaths of women assigned to acute leukaemia may be of more significance. It occurred more at the younger ages.
- (c) Arteriosclerotic heart disease. The S.M.R. for females rose from 129 to 130, but fell slightly for males. It would be premature to suggest that this might be the turning of the tide for this disease for a similar happening occurred in 1953 only to be followed by an increase larger than usual in the next year.
- (d) Respiratory diseases. As a result of the influenza epidemic mentioned earlier the S.M.R. for this group of conditions increased considerably when compared with 1958. The increase was, however, restricted to influenza and pneumonia. Bronchitis, on the other hand, showed a slight fall.

\*MORRIS, J. M. 1957. Uses of Epidemiology, page 2.

- (e) Deaths from motor vehicle traffic accidents. This has also been referred to earlier. Although numerically more important in males the proportional increase was greater in females.

Those causes of death which showed a decrease in 1959 compared with 1958 included tuberculosis, whose S.M.R. is well under a third of what it was at the beginning of the decade. There was an encouraging reduction in the number of deaths assigned to carcinoma of the breast. Although occurring in both sexes, the decrease of 241 deaths assigned to this cause among females meant that the S.M.R. has dropped for the first time to 97. However, the distribution of deaths by age shows that there is no consistency in this decrease, and therefore, while encouraging, hopes of a permanent fall may prove to be false.

There was a fall in both sexes in mortality from ulcer of stomach and duodenum. Over the past decade any reduction in mortality from this cause has been restricted largely to males and, in fact, there were more deaths of women per year assigned to ulcer of stomach in the period 1955 to 1959 than in any year since 1940.

Suicides showed a decrease in both sexes. For women this occurred for the second successive year since the sharp rise that took place between 1952 and 1957.

#### Infant mortality

Once again the infant mortality rate fell in 1959 to its lowest level of 22.2 per 1,000 live births. There was, however, a rather disquieting factor concealed in this fall, or at the least a warning note. It has always been assumed in the past that of the two main divisions of infant mortality the neonatal (deaths under four weeks) portion would be the most difficult to reduce. On the other hand, it has been felt that a very large part of post-neonatal mortality (deaths over four weeks and under one year) was preventable.

This may well turn out to be true but it should be noted that in 1959 the mortality rate for babies aged between three and six months remained constant at 2.1 per 1,000 live births and has remained at that level since 1957. Further, the mortality rate between six months and one year at 1.8 per 1,000 live births was the same as in 1956, and was actually higher than in 1958; thus the post-neonatal mortality rate wants close watching. There is no evidence that this stability is due to the reduction of deaths from one group of causes being counterbalanced by an increase in another group.

The neonatal mortality rate, on the other hand, continued to fall from 16.2 per 1,000 live births in 1958 to 15.9 per 1,000 in 1959. A fall was seen in both deaths under one week and between one and four weeks.

The stillbirth rate fell from 21.5 per 1,000 total births in 1958 to 20.8 per 1,000 in 1959. This continued fall in the stillbirth rate is encouraging to see after a decade between 1948-57 in which there was no improvement. From 1st October 1960 it became compulsory to register the cause of stillbirth in England and Wales. This should make possible further epidemiological research which may help in reducing the stillbirth and perinatal mortality rates further.

While it is impossible to forecast the lowest stillbirth and infant mortality rates that it is possible to reach, some idea of what can be attained in the present state of our knowledge can be gained by consideration of the lowest rates attained in the various regions of England and Wales at the present time. This is shown in Table LVIII (page 99) and is summarised in the table below.

Infant mortality and stillbirth rates, 1959

	England and Wales	Lowest regional rate (Region given in brackets)	Highest regional rate (Region given in brackets)
Rates per 1,000 live births	Total infant mortality (under 1 year)	22.2	26.3 (Wales)
	Neonatal mortality (under 4 weeks)	15.9	19.6 (Wales)
	Early neonatal mortality (under 1 week)	13.6	16.3 (Wales)
	Late neonatal mortality (1 week and under 4 weeks)	2.3	3.3 (Wales)
	Post-neonatal mortality (4 weeks and under 1 year)	6.3	7.6 (East and West Ridings)
Rates per 1,000 total (live and still) births	Stillbirths (at or over 28 weeks gestation)	20.8	26.3 (Wales)
	Perinatal mortality (stillbirths plus infant deaths under 1 week)	34.1	42.2 (Wales)

Many explanations have been advanced for the differences in the regional mortality rates. It is possible that some of the differences may be the result of climatological factors and thus beyond our control. This seems unlikely, however, to account for more than a small part of the difference, a more likely explanation being found in the combination of the various social, medical and environmental factors which have rightly been incriminated in the past and many of which can be at least partially controlled.

The table below shows the position of England and Wales in relation to other countries with lower rates as far as the various components of the stillbirth and infant mortality rates are concerned.

Infant mortality and stillbirth rates, England and Wales and certain other countries, 1958

	England and Wales	Australia	Netherlands	New Zealand	Norway	Sweden
Rates per 1,000 live births	Total infant mortality (under 1 year)	22.2	20.5	17.2	19.4	20.0
	Neonatal mortality (under 4 weeks)	15.9	14.5	12.0	13.6	13.3
	Early neonatal mortality (under 1 week)	13.6	12.6	10.1	11.6	10.9
	Late neonatal mortality (1 week and under 4 weeks)	2.3	1.9	1.9	2.0	2.4
	Post-neonatal mortality (4 weeks and under 1 year)	6.3	6.0	5.2	5.8	6.7
Rate per 1,000 total (live and still) births	Stillbirths	20.8	*	16.7	15.0	14.3
	Perinatal mortality (Stillbirths plus infant deaths under 1 week)	34.1	*	26.7	26.5	25.1

\*Not available

#### Maternal mortality

In 1959 there were 243 deaths assigned to complications of pregnancy and childbirth and a further 47 to the results of abortion. There have been great advances in the care of the pregnant woman and this figure is only just over a tenth of the number assigned thirty years previously. Nevertheless, it would be premature to relax efforts to reduce this number still further. The Ministry of Health's confidential enquiry into maternal deaths, 1955-57,\* showed that almost half of the deaths occurring during that period were classified as avoidable. In addition it should be remembered that maternal deaths can be likened to the part of the iceberg that appears above the surface of the water. If many of the deaths were avoidable, then there must be a quantity of disease which does not end fatally which is also avoidable.

The number of maternal deaths assigned to individual causes are now so small that random fluctuations are probably beginning to make their appearance. Thus small increases in a few of the causes are probably attributable to this. The largest single cause among those shown was toxæmia with 57 deaths assigned in 1959 compared with 66 in 1958.

\*MINISTRY OF HEALTH. Confidential enquiries into maternal deaths, 1955-1957. Reports on Public Health and Medical Subjects No. 103. H.M.S.O., London.

Table XLIV. Crude annual death rates per 1,000 living, and Standardised Mortality Ratios, 1841 to 1959, England and Wales

Period	Crude death rate per 1,000 living		Standardised Mortality Ratio* (1950-52=100)	
	Males	Females	Males	Females
1841-1850 ... ..	23.1	21.6	320	396
1851-1860 ... ..	23.1	21.4	313	384
1861-1870 ... ..	23.7	21.4	319	383
1871-1880 ... ..	22.7	20.1	308	362
1881-1890 ... ..	20.3	18.1	281	327
1891-1900 ... ..	19.3	17.1	268	307
1901-1910 ... ..	16.4	14.4	221	248
1911-1920 ... ..	15.1	13.0	187	207
1921-1930 ... ..	12.9	11.4	142	159
1931-1940 ... ..	13.0	11.5	125	136
1941-1950 ... ..	12.5	10.9	104	107
1941 ... ..	14.0	11.8	124	127
1942 ... ..	12.5	10.5	109	111
1943 ... ..	12.7	11.1	109	114
1944 ... ..	12.6	10.7	106	108
1945 ... ..	12.3	10.7	103	106
1946 ... ..	12.2	10.9	101	106
1947 ... ..	12.9	11.2	106	108
1948 ... ..	11.5	10.1	93	95
1949 ... ..	12.3	11.1	99	103
1950 ... ..	12.3	11.0	98	101
1951 ... ..	13.4	11.8	106	106
1952 ... ..	12.2	10.5	96	93
1953 ... ..	12.2	10.7	96	94
1954 ... ..	12.2	10.5	95	91
1955 ... ..	12.5	10.9	97	93
1956 ... ..	12.5	10.9	96	92
1957 ... ..	12.3	10.7	94	88
1958 ... ..	12.4	11.0	95	90
1959 ... ..	12.3	11.0	94	89

\* Civilians only, 1914-1918 and 1939-1949.

Table XLV. Abridged life table, 1957-59, England and Wales

Males		Age $x$	Females	
$l_x$	${}^o e_x$		$l_x$	${}^o e_x$
10,000	68.0	0	10,000	73.7
9,748	68.7	1	9,801	74.2
9,732	67.8	2	9,788	73.3
9,723	66.9	3	9,780	72.3
9,715	65.9	4	9,774	71.4
9,709	65.0	5	9,770	70.4
9,686	60.1	10	9,753	65.5
9,666	55.2	15	9,740	60.6
9,622	50.5	20	9,721	55.7
9,569	45.8	25	9,695	50.9
9,518	41.0	30	9,663	46.0
9,458	36.2	35	9,617	41.2
9,369	31.6	40	9,548	36.5
9,226	27.0	45	9,440	31.9
8,987	22.7	50	9,275	27.4
8,565	18.6	55	9,026	23.1
7,850	15.1	60	8,653	19.0
6,824	12.0	65	8,074	15.2
5,479	9.4	70	7,192	11.8
3,893	7.1	75	5,878	8.8
2,305	5.3	80	4,152	6.5
979	4.2	85	2,278	4.7

This abridged life table is constructed from the estimated *home* population in 1957, 1958, and 1959, and the total deaths registered in those years.

The column headed  $l_x$  shows, for each sex, the numbers who would survive to exact age  $x$  out of 10,000 born who were subject throughout their lives to the recorded age death rates of the period.

Column  ${}^o e_x$  is the "expectation of life", that is, the average future lifetime which would be lived by persons aged exactly  $x$ , if likewise subject to those death rates.

Table XLVI. Expectation of life at birth and at age 1 year, 1838 to 1959, England and Wales

From English Life Table	Year	Expectation of life at			
		Birth		Age 1 year	
		Males	Females	Males	Females
No. 1 ... ..	1841	40	42	47	48
2 ... ..	1838-44	40	42	47	47
3 ... ..	1838-54	40	42	47	47
4 ... ..	1871-80	41	45	48	50
5 ... ..	1881-90	44	47	51	53
6 ... ..	1891-1900	44	48	52	55
7 ... ..	1901-10	49	52	56	58
8 ... ..	1910-12	52	55	58	60
9 ... ..	1920-22	56	60	60	63
10 ... ..	1930-32	59	63	62	65
11 ... ..	1950-52	66	72	68	72
From annual Abridged Life Tables	1943	62	67	64	69
	1944	62	68	64	70
	1945	63	69	65	71
	1946	65	69	67	71
	1947	64	69	67	71
	1948	66	71	68	72
	1949	66	71	68	72
	1950	67	71	68	72
	1951	66	71	67	72
	1952	67	72	68	73
	1953	67	72	68	73
	1954	68	73	69	74
	1955	68	73	68	74
	1956	68	73	69	74
	1957	68	74	69	74
	1958	68	74	69	74
	1959	68	74	69	74

Table XLVII. Annual death rates per 1,000 living, by quarters in each year 1931 to 1959, with ratios to each yearly rate taken as 100, England and Wales

	Death rate per 1,000 living				Ratio to yearly rate taken as 100			
	March	June	September	December	March	June	September	December
	1931	16.5	11.5	9.6	11.7	134	93	78
1932	15.4	11.6	9.7	11.5	128	97	81	96
1933	17.1	10.8	9.4	12.0	139	88	76	98
1934	14.6	11.8	9.6	11.2	124	100	81	95
1935	13.2	12.0	9.8	12.0	113	103	84	103
1936	15.1	11.8	9.7	12.0	125	98	80	99
1937	16.2	11.6	9.7	12.3	131	94	78	99
1938	13.6	11.6	9.9	11.5	117	100	85	99
1939	15.1	11.7	9.9	11.8	125	97	82	98
1940	20.6	11.9	10.8	14.1	143	83	75	98
1941	18.4	14.2	10.1	11.5	136	105	75	85
1942	15.8	12.0	9.8	11.6	128	98	80	94
1943	14.5	11.7	10.1	15.7	112	90	78	121
1944	15.3	12.0	11.0	12.7	120	94	87	100
1945	16.5	11.5	10.0	12.6	131	91	79	100
1946	15.4	11.2	9.7	11.9	128	93	81	99
1947	17.6	11.3	9.2	11.4	143	92	75	93
1948	12.4	10.3	9.4	11.7	113	94	85	106
1949	15.2	11.2	9.3	11.8	129	95	79	100
1950	14.0	11.1	9.3	12.3	120	95	80	106
1951	19.1	11.1	9.1	11.0	153	89	73	88
1952	13.4	10.6	8.9	12.4	119	94	79	110
1953	15.8	10.4	8.9	10.7	139	91	78	94
1954	14.0	10.6	9.3	11.4	124	94	82	101
1955	15.4	11.2	9.1	11.1	132	96	78	95
1956	15.3	10.8	9.3	11.3	131	92	79	97
1957	12.2	10.6	9.7	13.4	106	92	84	117
1958	14.7	11.0	9.3	11.7	126	94	79	100
1959	15.8	10.6	9.0	11.1	136	91	78	96



Table XLVIII. Average annual death rates per 1,000 living, by sex and age, 1841 to 1959, England and Wales

	Males									Females								
	All ages	0-*	1-	5-	15-	25-	45-	65-	85 and over	All ages	0-*	1-	5-	15-	25-	45-	65-	85 and over
1841-1850 ...	23.1	167		7.24	8.23	11.2	23.6	89.6	312.3	21.6	137		7.27	8.50	11.6	21.1	82.4	293.2
1851-1860 ...	23.1	168		6.79	7.71	10.9	23.2	86.8	308.3	21.4	139		6.84	7.98	10.9	20.1	80.0	289.0
1861-1870 ...	23.7	168		6.43	7.26	11.5	24.8	87.7	315.0	21.4	139		6.25	7.30	10.7	20.6	79.8	285.0
1871-1880 ...	22.7	163		5.29	6.24	11.3	26.1	90.2	327.4	20.1	134		5.05	6.12	9.92	21.0	80.9	296.4
1881-1890 ...	20.3	155		4.20	4.97	9.79	25.5	89.4	306.0	18.1	128		4.23	4.97	8.76	20.6	78.9	271.0
1891-1900 ...	19.3	168		3.40	4.38	8.82	25.2	89.4	286.7	17.1	138		3.49	4.06	7.58	20.3	79.5	261.3
1901-1905 ...	17.1	151		2.93	3.77	7.59	23.0	83.4	274.6	15.0	124		3.03	3.34	6.34	18.1	72.5	249.4
1906-1910 ...	15.6	129		2.67	3.45	6.76	21.7	82.0	283.0	13.8	105		2.78	3.05	5.60	16.9	70.8	250.9
1911-1915 ...	15.5	121		2.75	3.69	6.76	21.0	81.7	281.6	13.3	97		2.75	3.00	5.17	16.0	69.5	245.4
1916-1920 ...	14.9	101		3.11	4.85	7.61	19.5	81.1	267.8	12.8	79		3.18	4.06	5.91	14.4	65.9	241.9
1921-1925 ...	12.9	86		2.10	3.06	5.24	16.9	76.2	272.7	11.4	66		2.05	2.83	4.26	12.8	64.0	241.2
1926-1930 ...	12.9	77		2.06	2.93	4.84	17.0	76.3	298.1	11.4	59		1.90	2.67	3.97	12.4	62.5	254.4
1931-1935 ...	12.7	70	6.88	1.84	2.81	4.23	16.6	75.1	278.9	11.4	54	6.23	1.71	2.51	3.67	11.9	61.0	245.0
1936-1940 ...	13.3	62	5.00	1.60	2.64	3.95	17.3	76.2	286.9	11.6	48	4.40	1.40	2.17	3.22	11.5	60.1	253.0
1941-1945 ...	12.8	56	3.72	1.44	2.99	3.72	15.7	69.0	227.0	10.9	44	3.26	1.13	1.98	2.84	9.86	52.6	207.0
1946-1950 ...	12.2	41	1.90	0.79	1.42	2.58	14.5	69.9	241.6	10.9	32	1.62	0.59	1.29	2.17	8.79	52.1	208.9
1951-1955 ...	12.5	30	1.23	0.52	1.05	2.05	13.9	75.5	265.9	10.9	23	1.04	0.37	0.60	1.60	8.02	51.9	222.0
1956 ...	12.5	27	0.98	0.43	0.93	1.85	13.5	75.8	256.2	10.9	20	0.83	0.30	0.45	1.40	7.55	51.0	222.7
1957 ...	12.3	26	1.04	0.46	1.03	1.86	13.7	73.5	226.8	10.7	20	0.90	0.32	0.49	1.41	7.59	48.7	199.2
1958 ...	12.4	25	0.99	0.44	0.95	1.81	13.5	75.1	242.6	11.0	20	0.77	0.27	0.45	1.32	7.45	49.9	215.6
1959 ...	12.3	25	1.00	0.43	1.03	1.79	13.5	73.9	240.0	11.0	20	0.81	0.31	0.44	1.30	7.34	49.3	215.4

\* Per thousand live births; related live births from 1931 to 1956.

Table XLIX. Deaths, death rates per million living, and Standardised Mortality Ratios (1950-52=100), from selected causes, by sex, 1950 to 1959, England and Wales

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	
All causes											
Deaths	{ M F	261,152 249,149	281,724 267,656	257,760 239,724	259,490 244,039	259,797 242,099	266,976 251,888	267,904 253,427	266,407 248,463	270,639 256,204	269,878 257,773
Rate	{ M F	12,337 10,995	13,387 11,754	12,210 10,493	12,237 10,655	12,204 10,532	12,482 10,927	12,451 10,947	12,306 10,682	12,447 10,965	12,332 10,969
S.M.R.	{ M F	98 101	106 106	96 93	96 94	95 91	97 93	96 92	94 88	95 90	94 89
Tuberculosis, all forms (001-019)											
Deaths	{ M F	9,922 6,047	8,826 4,980	7,114 3,471	5,964 2,938	5,392 2,505	4,533 1,959	3,804 1,571	3,414 1,370	3,207 1,273	2,810 1,044
Rate	{ M F	469 267	419 219	337 152	281 128	253 109	212 85	177 68	158 59	147 54	128 44
S.M.R.	{ M F	115 125	103 103	82 72	69 61	62 52	52 41	43 33	38 28	36 26	31 21
All malignant neoplasms (140-205)											
Deaths	{ M F	43,570 41,700	44,632 41,448	45,429 42,213	45,935 41,989	47,313 42,782	48,160 43,180	48,935 43,775	50,056 43,961	50,735 45,069	51,783 45,334
Rate	{ M F	2,058 1,840	2,121 1,820	2,152 1,848	2,166 1,833	2,223 1,861	2,252 1,873	2,274 1,891	2,312 1,890	2,333 1,929	2,366 1,929
S.M.R.	{ M F	98 101	101 99	101 99	102 98	103 98	104 98	105 97	106 96	106 97	107 97
Malignant neoplasm of stomach (151)											
Deaths	{ M F	7,985 6,404	8,128 6,478	8,039 6,316	8,016 6,176	7,818 6,232	7,942 6,146	7,712 6,163	7,951 5,966	7,934 6,178	7,930 6,146
Rate	{ M F	377 283	386 284	381 276	378 270	367 271	371 267	358 266	367 257	365 264	362 262
S.M.R.	{ M F	99 102	101 101	99 97	98 93	95 92	95 90	91 89	93 84	92 85	91 83
Malignant neoplasm of trachea, bronchus and lung (162, 163)											
Deaths	{ M F	10,219 1,978	11,127 2,072	11,942 2,228	12,835 2,239	13,941 2,323	14,761 2,438	15,544 2,553	16,358 2,670	17,040 2,780	18,181 2,882
Rate	{ M F	483 87	529 91	566 98	605 98	655 101	690 106	722 110	756 115	784 119	831 123
S.M.R.	{ M F	92 96	101 99	107 105	114 104	122 107	128 111	133 115	138 118	142 121	149 124
Malignant neoplasm of breast (170)											
Deaths	{ M F	65 7,892	63 7,972	59 8,251	81 8,115	80 8,315	77 8,449	69 8,522	70 8,552	73 8,949	62 8,708
Rate	{ M F	3 348	3 350	3 361	4 354	4 362	4 367	3 368	3 368	3 383	3 371
S.M.R.	{ M F	105 100	102 99	94 101	128 99	125 100	119 100	105 100	105 99	109 101	92 97
Malignant neoplasm of uterus (171-174)											
Deaths	F	4,121	4,043	4,008	3,926	3,827	3,844	3,921	3,912	4,115	4,003
Rate	F	182	178	175	171	166	167	169	168	176	170
S.M.R.	F	103	99	97	94	91	90	91	89	93	89
Leukaemia and aleukaemia (204)											
Deaths	{ M F	994 838	984 943	1,102 941	1,116 1,005	1,142 1,018	1,223 1,001	1,229 1,086	1,301 1,093	1,301 1,085	1,315 1,219
Rate	{ M F	47 37	47 41	52 41	53 44	54 44	57 43	57 47	60 47	60 46	60 52
S.M.R.	{ M F	97 93	96 104	107 103	108 109	110 110	117 107	116 115	122 115	121 113	121 125

Table XLIX—continued

		1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
<b>Diabetes mellitus (260)</b>											
Deaths	{ M	1,221	1,219	1,091	1,066	1,048	1,084	1,108	1,013	1,152	1,100
	{ F	2,463	2,484	2,247	2,128	1,980	2,207	2,134	2,124	2,163	2,093
Rate	{ M	58	58	52	50	49	51	51	47	53	50
	{ F	109	109	98	93	86	96	92	91	93	89
S.M.R.	{ M	104	104	92	89	87	89	90	81	92	87
	{ F	105	104	92	86	78	86	82	80	80	77
<b>Vascular lesions affecting central nervous system (330-334)</b>											
Deaths	{ M	27,175	29,003	29,158	28,762	30,516	31,098	31,034	30,537	31,298	30,897
	{ F	37,528	39,443	40,230	39,307	41,626	43,054	43,453	43,132	44,879	44,253
Rate	{ M	1,284	1,378	1,381	1,356	1,433	1,454	1,442	1,411	1,439	1,412
	{ F	1,656	1,732	1,761	1,716	1,811	1,868	1,877	1,854	1,921	1,883
S.M.R.	{ M	96	103	102	99	104	105	104	100	102	100
	{ F	98	101	101	97	100	101	100	97	99	96
<b>Diseases of the circulatory system (400-468)</b>											
Deaths	{ M	92,480	97,749	92,513	91,423	94,637	96,704	98,065	95,784	99,907	96,306
	{ F	93,396	98,922	90,151	90,477	91,331	95,222	95,470	92,566	97,738	95,526
Rate	{ M	4,369	4,645	4,382	4,311	4,446	4,521	4,558	4,425	4,595	4,401
	{ F	4,121	4,344	3,946	3,950	3,973	4,131	4,124	3,980	4,183	4,065
S.M.R.	{ M	98	104	97	95	97	98	99	95	98	94
	{ F	102	105	93	92	90	92	91	86	89	85
<b>Arteriosclerotic heart disease (420)</b>											
Deaths	{ M	35,379	37,654	39,568	39,449	42,919	44,857	47,476	48,266	52,085	52,193
	{ F	20,455	21,777	22,827	23,175	24,925	26,813	28,300	28,910	31,956	32,729
Rate	{ M	1,671	1,789	1,874	1,860	2,016	2,097	2,206	2,230	2,395	2,385
	{ F	903	956	999	1,012	1,084	1,163	1,222	1,243	1,368	1,393
S.M.R.	{ M	94	101	105	104	112	116	121	122	129	128
	{ F	96	100	103	103	108	115	119	119	129	130
<b>Diseases of the respiratory system (470-527)</b>											
Deaths	{ M	32,263	45,783	31,951	36,799	31,090	35,381	36,080	37,939	37,024	40,756
	{ F	23,145	35,824	21,038	26,364	20,056	23,345	24,428	24,066	23,784	27,796
Rate	{ M	1,524	2,176	1,514	1,735	1,460	1,654	1,677	1,753	1,703	1,862
	{ F	1,021	1,573	921	1,151	873	1,013	1,055	1,035	1,018	1,183
S.M.R.	{ M	88	126	87	100	83	94	95	98	96	104
	{ F	88	135	77	96	71	81	83	80	79	91
<b>Influenza (480-483)</b>											
Deaths	{ M	1,862	7,393	879	2,905	878	1,460	1,272	3,553	1,216	3,898
	{ F	2,040	8,416	871	3,560	933	1,523	1,354	3,163	1,185	3,964
Rate	{ M	88	351	42	137	41	68	59	164	56	178
	{ F	90	370	38	155	41	66	58	136	51	169
S.M.R.	{ M	55	220	26	85	25	42	36	99	34	107
	{ F	55	223	23	91	23	37	33	74	27	90
<b>Pneumonia (490-493, 763)</b>											
Deaths	{ M	9,608	12,189	10,335	11,273	9,750	11,101	11,671	12,074	12,311	13,648
	{ F	8,842	11,290	9,218	10,414	9,126	10,715	11,549	11,488	12,264	13,692
Rate	{ M	454	579	490	532	458	519	542	558	566	624
	{ F	390	496	404	455	397	465	499	494	525	583
S.M.R.	{ M	89	114	97	105	90	102	107	109	110	121
	{ F	92	115	93	104	90	104	110	107	112	123
<b>Bronchitis (500-502)</b>											
Deaths	{ M	17,703	22,910	17,781	19,567	17,163	19,318	19,890	18,956	20,326	20,193
	{ F	10,959	14,582	9,787	11,141	8,625	9,675	10,019	8,141	9,070	8,858
Rate	{ M	836	1,089	842	923	806	903	924	876	935	923
	{ F	484	640	428	486	375	420	433	350	388	377
S.M.R.	{ M	91	118	91	99	86	96	98	92	98	96
	{ F	95	124	81	91	68	76	77	61	68	65

Table XLIX—continued

		1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
<b>Ulcer of stomach and duodenum (540, 541)</b>											
Deaths	{ M	3,882	4,276	4,059	3,795	4,011	3,975	3,778	3,568	3,425	3,090
	{ F	1,218	1,354	1,325	1,331	1,467	1,542	1,564	1,461	1,473	1,473
Rate	{ M	183	203	192	179	188	186	176	165	158	141
	{ F	54	59	58	58	64	67	68	63	63	63
S.M.R.	{ M	95	105	99	92	96	94	89	83	79	70
	{ F	96	104	100	99	107	111	111	101	101	99
<b>Appendicitis (550-553)</b>											
Deaths	{ M	744	679	598	550	547	485	522	497	462	430
	{ F	555	493	447	356	422	360	331	302	328	271
Rate	{ M	35	32	28	26	26	23	24	23	21	20
	{ F	24	22	20	16	18	16	14	13	14	12
S.M.R.	{ M	110	101	88	81	80	70	75	71	65	60
	{ F	113	99	89	70	82	69	63	57	61	50
<b>Nephritis and nephrosis (590-594)</b>											
Deaths	{ M	3,352	3,155	2,898	2,706	2,645	2,448	2,554	2,250	2,158	1,923
	{ F	3,368	3,193	2,795	2,549	2,453	2,294	2,125	1,945	1,920	1,762
Rate	{ M	158	150	137	128	124	114	119	104	99	88
	{ F	149	140	122	111	107	100	92	84	82	75
S.M.R.	{ M	106	101	92	86	83	76	79	69	66	58
	{ F	109	102	89	80	76	70	64	58	57	51
<b>Accidents, poisonings and violence (E800-E999)</b>											
Deaths	{ M	11,905	12,447	11,992	12,333	12,630	12,932	12,992	12,858	13,343	13,456
	{ F	6,984	7,309	6,810	7,531	8,239	8,537	8,878	8,703	9,113	9,379
Rate	{ M	562	591	568	582	593	605	604	594	614	615
	{ F	308	321	298	329	358	370	383	374	390	399
S.M.R.	{ M	98	103	99	101	103	105	105	103	106	106
	{ F	101	104	96	104	112	115	118	113	117	119
<b>Motor vehicle traffic accidents (E810-E825)</b>											
Deaths	{ M	3,099	3,293	3,013	3,225	3,289	3,552	3,655	3,608	3,966	4,345
	{ F	1,035	1,099	958	1,021	1,158	1,256	1,284	1,219	1,400	1,607
Rate	{ M	146	156	143	152	155	166	170	167	182	199
	{ F	46	48	42	45	50	54	55	52	60	68
S.M.R.	{ M	98	105	96	102	104	112	115	112	123	133
	{ F	101	107	92	97	109	118	119	111	127	144
<b>Accidents in the home and residential institutions (E870-0 and 7-E936-0 and 7)</b>											
Deaths	{ M	1,825	2,002	1,955	2,157	2,452	2,424	2,516	2,419	2,559	2,519
	{ F	3,261	3,481	3,271	3,738	4,165	4,227	4,392	4,248	4,442	4,491
Rate	{ M	86	95	93	102	115	113	117	112	118	115
	{ F	144	153	143	163	181	183	190	183	190	191
S.M.R.	{ M	94	104	102	113	127	125	129	122	128	125
	{ F	99	104	96	108	118	118	120	113	116	115
<b>Suicide and self-inflicted injury (E970-E979)</b>											
Deaths	{ M	2,885	2,831	2,788	3,020	3,178	3,060	3,198	3,170	3,175	3,116
	{ F	1,586	1,638	1,550	1,734	1,865	1,940	2,084	2,145	2,123	2,091
Rate	{ M	136	135	132	142	149	143	149	146	146	142
	{ F	70	72	68	76	81	84	90	92	91	89
S.M.R.	{ M	102	100	98	106	110	105	109	107	106	104
	{ F	101	103	97	108	115	119	126	129	127	124

Table L. Death rates per 1,000 living, by sex and age, and Standardised Mortality Ratios (all ages), in standard regions and urban and rural aggregates within regional groups, 1959, England and Wales

	Males							Females						
	All ages	0-	5-	15-	45-	65 and over	S.M.R.	All ages	0-	5-	15-	45-	65 and over	S.M.R.
<b>ENGLAND AND WALES</b> ... ..	12.3	6.12	0.43	1.55	13.5	81.1	100	11.0	4.90	0.31	1.03	7.34	59.1	100
<i>Urban and rural aggregates:</i>														
Conurbations ... ..	12.4	6.34	0.42	1.58	14.5	85.1	106	10.8	5.09	0.28	1.03	7.51	60.1	102
<i>Areas outside conurbations:</i>														
Urban areas with populations of 100,000 and over ... ..	12.6	6.26	0.40	1.57	14.4	84.2	104	11.1	5.01	0.30	1.11	7.51	60.9	103
Urban areas with populations of 50,000 and under 100,000 ... ..	12.7	5.83	0.52	1.58	13.6	84.4	103	11.6	4.78	0.31	1.01	7.60	60.0	102
Urban areas with populations under 50,000 ... ..	12.8	6.19	0.42	1.55	13.0	80.4	98	11.3	4.90	0.33	1.01	7.28	58.7	99
Rural districts ... ..	11.4	5.68	0.46	1.46	11.5	73.2	89	10.5	4.55	0.34	0.99	6.82	56.1	95
<b>NORTH OF ENGLAND</b>														
<i>Regions:</i>														
Northern ... ..	12.3	6.84	0.42	1.66	14.4	81.3	103	10.3	5.40	0.29	1.13	7.86	61.4	105
East and West Ridings ... ..	12.8	6.52	0.45	1.62	14.3	84.3	105	11.2	5.40	0.31	1.13	7.79	62.4	106
North Western ... ..	13.5	6.86	0.48	1.75	15.4	88.2	111	11.8	5.54	0.26	1.17	8.16	64.1	109
Total ... ..	13.0	6.76	0.46	1.69	14.9	85.4	107	11.3	5.46	0.28	1.15	7.99	63.0	107
<i>Conurbations:</i>														
Tyneside ... ..	12.7	7.32	0.44	1.64	15.4	85.3	108	10.2	5.83	0.25	1.16	8.09	59.8	104
West Yorkshire ... ..	14.0	6.72	0.48	1.65	15.4	90.7	112	12.5	5.76	0.37	1.13	8.26	65.0	111
South East Lancashire ... ..	13.6	7.04	0.46	1.82	16.1	90.1	114	12.0	5.33	0.23	1.17	8.33	65.3	111
Merseyside ... ..	12.2	6.80	0.45	1.67	15.9	88.3	112	10.3	5.97	0.22	1.22	8.09	60.3	105
Total ... ..	13.3	6.94	0.46	1.72	15.8	89.3	112	11.5	5.67	0.27	1.17	8.23	63.5	109
<i>Areas outside conurbations:</i>														
Urban areas with populations of 100,000 and over ... ..	12.9	6.44	0.42	1.69	15.5	84.9	108	11.1	5.67	0.29	1.24	7.92	63.1	108
Urban areas with populations of 50,000 and under 100,000 ... ..	13.4	6.60	0.41	1.79	14.7	87.8	109	11.8	5.42	0.23	1.13	8.47	64.6	110
Urban areas with populations under 50,000 ... ..	13.2	6.80	0.45	1.68	13.8	84.0	104	11.2	5.19	0.33	1.11	7.68	62.6	106
Rural districts ... ..	11.6	6.43	0.52	1.56	12.8	76.1	95	10.3	4.89	0.29	1.07	7.34	59.9	101
<b>MIDLANDS AND EASTERN</b>														
<i>Regions:</i>														
North Midland ... ..	11.7	6.06	0.47	1.53	12.4	79.0	96	10.2	4.93	0.30	0.97	6.93	58.4	98
Midland ... ..	11.5	6.48	0.40	1.56	14.0	81.5	102	10.0	5.10	0.33	1.04	7.51	59.6	101
Eastern ... ..	11.2	5.14	0.50	1.39	11.0	73.4	88	10.4	4.09	0.33	0.85	6.41	55.4	92
Total ... ..	11.5	5.94	0.45	1.50	12.6	78.0	96	10.2	4.74	0.32	0.97	7.00	57.8	97
<i>Conurbation:</i>														
West Midlands ... ..	11.7	6.65	0.40	1.59	15.2	84.2	107	10.0	5.11	0.32	0.99	7.62	62.2	105
<i>Areas outside conurbation:</i>														
Urban areas with populations of 100,000 and over ... ..	12.0	5.98	0.39	1.52	13.7	84.0	102	10.7	4.96	0.35	1.09	7.11	60.8	102
Urban areas with populations of 50,000 and under 100,000 ... ..	11.3	5.64	0.66	1.48	13.1	80.9	99	9.72	3.98	0.32	0.94	7.24	57.4	97
Urban areas with populations under 50,000 ... ..	11.8	5.87	0.42	1.47	12.0	77.0	93	10.4	5.06	0.32	0.89	6.83	56.3	95
Rural districts ... ..	10.9	5.60	0.47	1.46	10.5	71.7	86	9.97	4.34	0.30	0.94	6.54	54.9	92
<b>GREATER LONDON</b> ... ..	12.0	5.70	0.39	1.48	13.4	82.1	100	10.5	4.56	0.28	0.94	6.94	57.1	96
<b>SOUTH OF ENGLAND</b>														
<i>Regions:</i>														
London and South Eastern (excluding Greater London) ... ..	13.5	5.34	0.49	1.45	12.4	78.1	95	12.9	4.30	0.37	1.03	6.97	57.1	96
Southern ... ..	11.3	5.90	0.35	1.31	12.1	74.9	91	10.7	3.99	0.33	0.95	6.69	54.0	91
South Western ... ..	12.5	5.07	0.37	1.41	12.2	79.4	95	11.9	4.43	0.38	1.00	7.18	58.0	98
Total ... ..	12.4	5.42	0.40	1.39	12.2	77.6	94	11.9	4.25	0.36	0.99	6.97	56.5	95
<i>Urban areas with populations of 100,000 and over</i> ... ..	12.8	6.03	0.36	1.31	13.8	83.9	102	12.0	3.97	0.26	1.01	7.60	59.2	100
<i>Urban areas with populations of 50,000 and under 100,000</i> ... ..	13.5	5.08	0.46	1.47	12.9	84.4	101	13.3	4.80	0.37	1.00	7.01	58.3	98
<i>Urban areas with populations under 50,000</i> ... ..	12.9	5.48	0.40	1.43	12.4	78.1	95	12.1	4.17	0.36	0.99	6.99	56.5	95
Rural districts ... ..	11.4	5.22	0.41	1.35	11.1	71.7	87	10.9	4.26	0.40	0.99	6.59	54.5	92
<b>WALES (including Monmouthshire)</b>														
<i>Regions:</i>														
Wales I (South East) ... ..	13.3	7.29	0.46	1.86	14.7	84.7	107	10.5	5.87	0.30	1.10	7.77	61.9	106
Wales II (remainder) ... ..	13.9	6.26	0.49	1.48	13.8	80.8	100	12.5	5.38	0.36	1.06	8.17	60.7	104
<i>Urban areas with populations of 100,000 and over</i> ... ..	13.0	7.29	0.51	2.00	15.2	83.7	108	10.3	5.70	0.27	1.04	7.47	60.9	103
<i>Urban area with population of 50,000 and under 100,000</i> ... ..	14.7	9.58	0.87	1.67	16.4	76.4	105	11.7	8.70	0.22	0.51	10.1	68.3	120
<i>Urban areas with populations under 50,000</i> ... ..	14.0	7.46	0.41	1.75	14.5	86.8	108	11.5	5.59	0.29	1.16	8.19	63.3	108
Rural districts ... ..	13.0	5.99	0.49	1.57	13.7	79.9	99	11.0	5.67	0.40	1.06	7.61	59.7	102

Table LI. Deaths from certain causes: (a) by sex and age, (b) distinguishing deaths in which a post-mortem was performed or there was a record of operation, and (c) the percentage to all deaths, 1959, England and Wales

ICD No.	Cause of death	Males					Females					Persons
		All ages	0-	15-	45-	65 and over	All ages	0-	15-	45-	65 and over	
	All causes ...	(a) 269,878 (b) 71,617 (c) 27	12,384 6,120 49	13,807 7,008 51	74,953 26,067 35	168,734 32,422 19	257,773 50,914 20	9,290 4,433 48	9,289 3,842 41	44,910 13,411 30	194,284 29,228 15	527,651 122,531 23
001-008	Tuberculosis, respiratory ...	(a) 2,620 (b) 839 (c) 32	7 5 71	328 115 35	1,219 404 33	1,066 315 30	854 272 32	10 6 60	249 74 30	300 96 32	295 96 33	3,474 1,111 32
010-019	Tuberculosis, other ...	(a) 190 (b) 104 (c) 55	32 18 56	44 19 43	68 43 63	46 24 52	190 100 53	23 15 65	41 21 51	55 31 56	71 33 46	380 204 54
84 020-029	Syphilitic disease ...	(a) 627 (b) 276 (c) 44	1 1 100	30 16 53	229 102 45	367 157 43	331 187 56	1 1 100	7 5 71	103 60 58	220 121 55	958 463 48
056	Whooping cough ...	(a) 11 (b) 5 (c) 45	11 5 45	— — —	— — —	— — —	14 4 29	14 4 29	— — —	— — —	— — —	25 9 36
057	Meningococcal infections ...	(a) 97 (b) 61 (c) 63	82 51 62	7 5 71	5 4 80	3 1 33	62 38 61	52 32 62	5 3 60	2 — —	3 3 100	159 99 62
080	Acute poliomyelitis ...	(a) 41 (b) 14 (c) 34	10 1 10	29 12 41	2 1 50	— — —	25 16 64	10 6 60	15 10 67	— — —	— — —	66 30 45
085	Measles ...	(a) 49 (b) 20 (c) 41	46 19 41	2 1 50	— — —	1 — —	49 19 39	41 15 37	4 3 75	1 1 100	3 — —	98 39 40
Rem. 001-138	Other diseases classified as infective or parasitic ...	(a) 507 (b) 239 (c) 47	112 80 71	96 51 53	184 78 42	115 30 26	466 213 46	93 60 65	87 49 56	145 60 41	141 4431 —	973 452 46
151	Malignant neoplasm: Stomach ...	(a) 7,930 (b) 1,466 (c) 18	— — —	238 53 22	2,989 601 20	4,703 812 17	6,146 847 14	— — —	152 22 14	1,420 268 19	4,574 557 12	14,076 2,313 16
162, 163	Trachea, bronchus, and lung ...	(a) 18,181 (b) 3,503 (c) 19	2 — —	643 123 19	9,677 1,925 20	7,859 1,455 19	2,882 617 21	3 2 67	183 37 20	1,294 295 23	1,402 283 20	21,063 4,120 20
170	Breast ...	(a) 62 (b) 12 (c) 19	— — —	1 1 100	24 7 29	37 4 11	8,708 1,647 19	— — —	747 147 20	3,913 839 21	4,048 661 16	8,770 1,659 19
171-174	Uterus ...	(a) 4,003 (b) 566 (c) 14	— — —	— — —	— — —	— — —	4,003 566 14	4 3 75	436 68 16	1,721 271 16	1,842 224 12	4,003 566 14
204	Leukaemia and aleukaemia ...	(a) 1,315 (b) 316 (c) 24	205 42 20	258 66 26	381 103 27	471 105 22	1,219 269 22	166 35 21	202 44 22	369 83 22	482 107 22	2,534 585 23
85 Rem. 140-205	Other malignant and lymphatic neoplasms ...	(a) 24,295 (b) 5,322 (c) 22	209 65 31	1,393 339 24	7,586 1,942 26	15,107 2,976 20	22,376 4,681 21	191 74 39	1,291 298 23	7,233 1,674 23	13,691 2,635 19	46,671 10,003 21
260	Diabetes mellitus ...	(a) 1,100 (b) 257 (c) 23	6 4 67	90 42 47	266 84 32	738 127 17	2,093 413 20	16 8 50	42 22 52	425 131 31	1,610 252 16	3,193 670 21
330-334	Vascular lesions affecting central nervous system ...	(a) 30,897 (b) 3,392 (c) 11	39 27 69	488 281 58	5,991 1,500 25	24,379 1,584 6	44,253 4,294 10	31 27 87	519 279 54	5,912 1,468 25	37,791 2,520 7	75,150 7,686 10
420	Arteriosclerotic heart disease, including coronary disease ...	(a) 52,193 (b) 19,032 (c) 36	2 2 100	1,514 1,053 70	19,219 8,642 45	31,458 9,335 30	32,729 8,777 27	— — —	213 125 59	5,356 1,905 36	27,160 6,747 25	84,922 27,809 33
440-443	Hypertension with heart disease ...	(a) 4,656 (b) 815 (c) 18	— — —	49 25 51	1,054 314 30	3,553 476 13	6,719 775 12	— — —	31 9 29	788 172 22	5,900 594 10	11,375 1,590 14
410-416, 421-434	Other heart disease ...	(a) 28,633 (b) 2,955 (c) 10	26 19 73	757 362 48	3,776 1,044 28	24,074 1,530 6	43,204 3,303 8	28 22 79	835 302 36	3,945 846 21	38,396 2,133 6	71,837 6,258 9

Table LI—continued

ICD No.	Cause of death	Males					Females					Persons All ages	
		All ages	0-	15-	45-	65 and over	All ages	0-	15-	45-	65 and over		
444-468	Other circulatory disease ...	(a)	10,761	12	317	2,218	8,214	12,811	11	224	1,447	11,129	23,572
		(b)	3,233	9	134	1,052	2,038	3,435	6	111	694	2,624	6,668
		(c)	30	75	42	47	25	27	55	50	48	24	28
480-483	Influenza ...	(a)	3,898	88	219	1,027	2,564	3,964	84	195	588	3,097	7,862
		(b)	523	35	95	221	172	407	44	87	118	158	930
		(c)	13	40	43	22	7	10	52	45	20	5	12
490-493, 763	Pneumonia ...	(a)	13,648	1,557	394	2,392	9,305	13,692	1,188	354	1,306	10,844	27,340
		(b)	3,902	959	211	980	1,752	2,829	728	162	446	1,493	6,731
		(c)	29	62	54	41	19	21	61	46	34	14	25
500-502	Bronchitis ...	(a)	20,193	296	215	5,966	13,716	8,858	225	132	1,316	7,185	29,051
		(b)	3,244	218	72	1,227	1,727	1,279	156	39	290	794	4,523
		(c)	16	74	33	21	13	14	69	30	22	11	16
470-475, 510-527	Other diseases of respiratory system ...	(a)	3,462	111	180	1,285	1,886	1,587	96	129	372	990	5,049
		(b)	1,539	82	87	623	747	473	75	63	134	201	2,012
		(c)	44	74	48	48	40	30	78	49	36	20	40
540, 541	Ulcer of stomach and duodenum ...	(a)	3,090	5	143	1,029	1,913	1,473	6	36	289	1,142	4,563
		(b)	1,872	3	106	724	1,039	814	5	25	211	573	2,686
		(c)	61	60	74	70	54	55	83	69	73	50	59
543, 571, 572, 764	Gastritis, enteritis, and diarrhoea ...	(a)	981	246	72	249	414	1,395	151	85	258	901	2,376
		(b)	513	127	43	155	188	677	82	51	157	387	1,190
		(c)	52	52	60	62	45	49	54	60	61	43	50
590-594	Nephritis and nephrosis ...	(a)	1,923	51	364	654	854	1,762	42	233	468	1,019	3,685
		(b)	435	25	105	162	143	381	18	57	130	176	816
		(c)	23	49	29	25	17	22	43	24	28	17	22
610	Hyperplasia of prostate ...	(a)	3,505	—	—	213	3,292	—	—	—	—	—	3,505
		(b)	1,427	—	—	122	1,305	—	—	—	—	—	1,427
		(c)	41	—	—	57	40	—	—	—	—	—	41
640-689	Pregnancy, childbirth, abortion ...	(a)	—	—	—	—	—	290	1	288	1	—	290
		(b)	—	—	—	—	—	233	1	232	—	—	233
		(c)	—	—	—	—	—	80	100	81	—	—	80

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750-759	Congenital malformations ...	(a)	2,503	2,037	218	160	88	2,408	1,930	182	194	102	4,911
		(b)	1,254	979	130	84	61	1,055	817	96	87	55	2,309
		(c)	50	48	60	52	69	44	42	53	45	54	47
Rem. 210-795	Other defined and ill-defined diseases ...	(a)	19,054	5,950	1,190	3,330	8,584	23,831	4,187	1,211	3,709	14,724	42,885
		(b)	6,701	2,581	607	1,476	2,037	6,874	1,762	604	1,571	2,937	13,575
		(c)	35	43	51	44	24	29	42	50	42	20	32
E810-E835	Motor vehicle accidents ...	(a)	4,414	391	2,192	959	872	1,612	200	367	388	657	6,026
		(b)	2,908	212	1,412	680	604	1,054	106	235	258	455	3,962
		(c)	66	54	64	71	69	65	53	64	66	69	66
E800-E802, E840-E962	All other accidents ...	(a)	5,745	817	1,437	1,349	2,142	5,533	437	245	576	4,275	11,278
		(b)	3,385	524	854	893	1,114	2,829	286	176	403	1,964	6,214
		(c)	59	64	59	66	52	51	65	72	70	46	55
E963, E970-E979	Suicide and self-inflicted injury ...	(a)	3,116	3	846	1,407	860	2,091	1	495	1,025	570	5,207
		(b)	1,942	2	558	844	538	1,421	—	344	694	383	3,363
		(c)	62	67	66	60	63	68	—	69	68	67	65
E964, E965, E980-E999	Homicide and operations of war ...	(a)	181	30	53	45	53	143	48	54	21	20	324
		(b)	111	25	30	30	26	115	37	42	18	18	226
		(c)	61	83	57	67	49	80	77	78	86	90	70

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Table LII. Notifications of certain infectious diseases: Notification rates per 100,000 living, by sex and age, 1959, England and Wales

	Scarlet fever		Whooping cough		Acute poliomyelitis				Measles (excluding rubella)		Diphtheria		Dysentery		Meningococcal infection	
	M	F	M	F	Paralytic		Non-paralytic		M	F	M	F	M	F	M	F
					M	F	M	F								
Under 1 year ...	25	23	445	457	6.9	6.1	0.79	0.56	2,165	2,325	0.26	—	215	208	33	29
1 ...	122	110	473	526	15	10	1.1	1.4	7,078	6,999	0.82	—	401	339	16	8.9
2 ...	384	335	565	634	11	9.5	3.7	2.1	9,398	9,416	0.28	—	453	395	11	3.3
3 ...	662	588	532	640	12	11	2.9	2.2	10,294	10,471	—	0.31	390	360	8.8	4.3
4 ...	884	828	573	629	11	6.4	5.5	2.5	11,177	10,955	1.2	—	373	321	7.0	4.1
5- ...	797	851	360	411	4.0	3.2	3.6	2.1	7,483	7,511	1.8	1.9	302	268	3.9	2.7
10- ...	160	182	33	37	1.2	1.6	1.3	1.1	404	430	0.48	0.39	101	86	1.3	1.4
15- ...	17	14	2.5	4.3	1.1	1.4	0.48	0.62	43	47	0.03	0.14	29	55	0.90	1.0
25 and over ...	3.1	4.0	1.1	3.5	1.6	0.81	0.35	0.34	13	17	0.03	0.13	53	79	0.73	0.57
∞ All ages ...	110	101	73	73	1.9	1.3	0.77	0.51	1,255	1,120	0.23	0.22	80	75	2.0	1.3

	Acute pneumonia		Acute encephalitis				Enteric or typhoid fever		Paratyphoid fevers		Erysipelas		Food poisoning	
	M	F	Infective		Post-infectious		M	F	M	F	M	F	M	F
			M	F	M	F								
Under 5 years ...	104	93	1.2	0.71	1.1	1.0	0.40	0.42	1.8	2.3	1.2	1.2	57	52
5- ...	45	42	0.9	0.41	1.1	0.56	0.23	0.18	1.2	1.8	1.5	1.6	29	26
15- ...	32	29	0.35	0.20	0.16	0.21	0.28	0.38	0.65	0.82	4.0	4.6	17	21
45- ...	84	51	0.11	0.08	0.13	0.08	0.16	0.33	0.38	0.46	12	13	14	14
65 and over ...	156	110	—	0.03	—	—	—	0.03	0.19	0.52	14	14	15	17
All ages ...	65	52	0.41	0.21	0.36	0.26	0.22	0.29	0.72	0.93	6.5	7.4	21	21

Table LII—continued

	Tuberculosis					
	Respiratory		Meninges and C.N.S.		Other	
	M	F	M	F	M	F
Under 5 years ... ..	21	22	2.1	1.3	3.8	3.5
5- ... ..	17	19	0.73	1.2	4.3	4.7
15- ... ..	70	83	0.62	0.83	7.9	11
25- ... ..	79	59	0.51	0.18	6.6	8.6
45- ... ..	102	25	0.29	0.16	3.8	4.4
65 and over ... ..	89	16	0.24	0.03	3.7	4.6
All ages ... ..	70	39	0.61	0.46	5.2	6.3



Table LIII. Trend of stillbirths per 1,000 total births, 1928 to 1959, and of deaths in the neonatal, post-neonatal and other age periods under 1 year per 1,000 live births, 1906 to 1959, England and Wales

Period	Total infant mortality (under 1 year)	Infant mortality per 1,000 live births* at various ages									Stillbirths and infant deaths—rates per 1,000 total births†				
		Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 year "birth wastage"	Stillbirths (late foetal deaths, at or over 28 weeks' gestation)	Stillbirths plus infant deaths under 1 week "perinatal mortality"	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year					
1906-1910	117.1	40.2	24.5	15.7	76.9	11.5	13.0	22.8	22.0	32.1	—	—	—	—	—
1911-1915	108.7	39.0	24.1	14.9	69.8	11.4	12.7	20.2	19.6	30.0	—	—	—	—	—
1916-1920	90.9	37.0	23.4	13.7	53.9	11.0	12.4	16.5	14.6	22.8	—	—	—	—	—
1921-1925	74.9	33.4	21.7	11.7	41.6	10.4	11.3	12.8	11.3	17.5	—	—	—	—	—
1926-1930	67.6	31.8	21.8	9.9	35.7	10.3	11.5	10.8	9.5	15.4	—	—	—	—	—
1931-1935	61.9	31.4	22.4	9.0	30.5	10.7	11.7	9.9	8.5	12.1	—	—	—	—	—
1936-1940	55.3	29.2	21.5	7.7	26.0	10.4	11.2	8.8	7.8	9.4	—	—	—	—	—
1941-1945	49.8	26.0	18.7	7.2	23.8	9.3	9.5	8.9	7.7	7.2	—	—	—	—	—
1946-1950	36.3	21.1	16.2	4.9	15.2	7.9	8.4	5.8	5.0	4.4	—	—	—	—	—
1928	65.3	31.1	21.6	9.5	34.2	10.4	11.2	10.7	9.3	14.2	102.6	40.1	60.8	41.7	69.9
1929	73.9	32.8	22.2	10.5	41.1	10.4	11.9	11.5	10.6	19.0	111.4	40.0	61.4	50.0	71.6
1930	60.2	30.9	22.0	8.9	29.3	10.4	11.6	9.7	7.9	11.7	98.3	40.8	61.9	36.4	70.4
1931	65.7	31.5	22.1	9.5	34.2	10.4	11.7	10.8	9.2	14.2	104.5	40.9	62.1	42.4	71.2
1932	64.5	31.5	22.4	9.2	33.0	10.6	11.8	10.8	9.0	13.2	103.7	41.3	62.8	40.8	71.6
1933	62.7	32.1	22.9	9.3	30.6	11.0	11.8	9.8	8.6	12.2	102.5	41.4	63.4	39.1	72.3
1934	59.3	31.4	22.7	8.7	27.9	10.9	11.8	8.9	7.7	11.3	96.7	40.5	62.2	34.5	70.5
1935	57.0	30.4	22.0	8.4	26.6	10.7	11.3	9.1	7.7	9.8	95.4	40.7	61.9	33.5	69.9
1936	58.7	30.2	21.9	8.2	28.5	10.7	11.3	9.3	8.3	10.9	95.9	39.7	60.8	35.2	68.7
1937	57.7	29.7	22.0	7.8	28.0	10.8	11.2	9.4	8.3	10.3	94.4	39.0	60.2	34.2	67.6
1938	52.8	28.3	21.1	7.1	24.5	10.3	10.8	8.2	7.3	9.0	88.9	38.3	58.6	30.4	65.5
1939	50.6	28.3	21.2	7.1	22.2	10.3	10.9	7.9	7.0	7.3	86.9	38.1	58.5	28.4	65.3
1940	56.8	29.6	21.3	8.3	27.2	9.8	11.5	9.3	8.2	9.7	92.5	37.2	57.7	34.7	65.7
1941	60.0	29.0	20.7	8.3	31.1	10.1	10.6	11.3	9.7	10.1	92.4	34.8	54.7	37.7	62.7
1942	50.6	27.2	19.6	7.7	23.4	9.6	10.0	8.7	7.5	7.2	81.1	33.2	52.1	29.0	59.4
1943	49.1	25.2	18.3	6.9	23.9	9.1	9.2	8.8	7.8	7.3	77.5	30.1	47.9	29.6	54.6
1944	45.4	24.4	17.5	6.9	21.1	8.8	8.8	8.0	7.0	6.1	70.9	27.6	44.5	26.3	51.1
1945	46.0	24.8	18.0	6.8	21.3	9.0	9.0	8.2	7.0	6.1	73.4	27.6	45.2	28.1	51.8
1946	42.9	24.5	17.8	6.7	18.4	8.7	9.1	7.1	6.1	5.2	66.9	27.2	44.3	22.6	50.7
1947	41.4	22.7	16.5	6.2	18.6	7.8	8.7	6.9	6.0	5.7	65.0	24.1	40.3	24.6	46.4
1948	33.9	19.7	15.6	4.1	14.2	7.8	7.9	5.5	4.8	3.9	56.8	23.2	38.5	18.4	42.5
1949	32.4	19.3	15.6	3.7	13.0	7.6	8.0	4.8	4.4	3.8	54.6	22.7	38.0	16.7	41.5
1950	29.6	18.5	15.2	3.3	11.1	7.2	8.0	4.3	3.7	3.1	51.7	22.6	37.4	14.3	40.7
1951	29.7	18.8	15.5	3.3	10.9	7.5	8.0	4.1	3.6	3.2	52.2	23.0	38.2	14.0	41.5
1952	27.6	18.3	15.2	3.2	9.3	7.6	7.6	3.7	3.0	2.6	49.6	22.7	37.5	12.1	40.6
1953	26.8	17.7	14.8	2.9	9.1	7.4	7.4	3.4	3.0	2.7	48.6	22.4	36.9	11.7	39.7
1954	25.4	17.7	14.9	2.8	7.7	7.6	7.4	3.0	2.6	2.1	48.4	23.5	38.1	10.3	40.8
1955	24.9	17.3	14.6	2.6	7.6	7.6	7.0	2.9	2.6	2.1	47.5	23.2	37.4	10.0	40.0
1956	23.7	16.8	14.2	2.6	6.9	7.4	6.8	2.7	2.3	1.8	46.0	22.9	36.7	9.2	39.3
1957	23.1	16.5	14.1	2.4	6.7	7.6	6.5	2.6	2.1	1.9	45.1	22.5	36.2	8.8	38.5
1958	22.5	16.2	13.8	2.4	6.4	7.5	6.3	2.6	2.1	1.7	43.6	21.5	35.0	8.6	37.3
1959	22.2	15.9	13.6	2.3	6.3	7.6	6.0	2.4	2.1	1.8	42.6	20.8	34.1	8.5	36.3

\* Rates based on related live births from 1926 to 1956.

† The births upon which these rates are based for successive calendar years are numbers registered up to 1938 inclusive, and numbers of occurrences from 1939.

Table LIV. Stillbirths per 1,000 total births, and deaths in the early neonatal, late neonatal, and post-neonatal periods per 1,000 live births\*, distinguishing illegitimacy, 1936 to 1959, England and Wales

		1936 to 1939	1940 to 1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
All infants	Stillbirths ... Annual rate (late foetal deaths at or over 28 weeks' gestation) ... per cent of 1936-39	38.8 100	32.3 83	27.6 71	27.2 70	24.1 62	23.2 60	22.7 59	22.6 58	23.0 59	22.7 59	22.4 58	23.5 61	23.2 60	22.9 59	22.5 58	21.5 55	20.8 54
	Early neonatal deaths (Under 1 week) ... Annual rate ... per cent of 1936-39	21.6 100	19.3 89	18.0 83	17.8 82	16.5 76	15.6 72	15.6 72	15.2 70	15.5 72	15.2 70	14.8 69	14.9 69	14.6 68	14.2 66	14.1 65	13.8 64	13.6 63
	Late neonatal deaths (1 week and under 4 weeks) ... Annual rate ... per cent of 1936-39	7.6 100	7.5 99	6.8 89	6.7 88	6.2 82	4.1 54	3.7 49	3.3 43	3.3 43	3.2 42	2.9 38	2.8 37	2.6 34	2.6 34	2.4 32	2.4 32	2.3 30
	Post-neonatal deaths (4 weeks and under 1 year) ... Annual rate ... per cent of 1936-39	25.8 100	25.1 97	21.3 83	18.4 71	18.6 72	14.2 55	13.0 50	11.1 43	10.9 42	9.3 36	9.2 36	7.7 30	7.6 29	6.9 27	6.7 26	6.4 25	6.3 24
Illegitimate infants	Stillbirths ... Annual rate (late foetal deaths at or over 28 weeks' gestation) ... per cent of 1936-39	49.6 100	39.9 80	31.5 64	33.2 67	30.6 62	31.6 64	29.5 59	29.1 59	31.6 64	29.7 60	29.8 60	29.2 59	28.8 58	29.0 58	28.7 58	28.4 57	27.4 55
	Early neonatal deaths (under 1 week) ... Annual rate ... per cent of 1936-39	34.4 100	28.1 82	24.3 71	23.7 69	23.5 68	22.0 64	24.9 72	21.4 62	21.4 62	21.3 62	19.3 56	20.2 59	20.8 60	18.9 55	19.8 58	18.3 53	18.2 53
	Late neonatal deaths (1 week and under 4 weeks) ... Annual rate ... per cent of 1936-39	10.9 100	10.7 98	10.0 92	9.6 88	9.9 91	5.5 50	4.8 44	4.5 41	4.3 39	3.9 36	3.2 29	3.5 32	3.1 28	2.7 25	2.9 27	2.3 21	2.5 23
	Post-neonatal deaths (4 weeks and under 1 year) ... Annual rate ... per cent of 1936-39	41.6 100	35.8 86	30.5 73	26.9 65	24.7 59	17.9 43	15.1 36	13.6 33	12.8 31	9.8 24	10.6 25	8.3 20	7.8 19	7.1 17	7.3 18	7.2 17	6.7 16

\* Rates prior to 1957 per 1,000 related live births,

Table LV. Principal causes of death under 1 year: (a) Age-group distribution per cent of all deaths assigned to each cause, (b) Cause distribution per 1,000 total deaths in each age-group, 1959, England and Wales

Aetiological group	Cause of death (and ICD No.)	Number of infant deaths (under 1 year)	Age distribution per cent of total infant deaths assigned to each cause					Cause distribution per 1,000 total infant deaths in each age-group				
			Infant mortality (under 1 year)	Neonatal mortality			Post-neonatal mortality (4 weeks and under 1 year)	Infant mortality (under 1 year)	Neonatal mortality			Post-neonatal mortality (4 weeks and under 1 year)
				Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)			Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)	
	All causes	16,629	100	71	61	10	29	1,000	1,000	1,000	1,000	1,000
Prenatal and natal group (including congenital malformations)	Congenital malformations (750-759) ...	3,398	100	63	41	21	37	204	179	138	421	267
	Total causes mainly of prenatal and natal origin other than congenital malformations ...	8,460	100	99	95	4	1	509	705	790	199	17
	Intracranial and spinal injury at birth (760) ...	1,458	100	100	94	6	0	88	123	134	52	0
	Other birth injury (including maternal antepartum haemorrhage) (761) ...	393	100	100	99	1	—	24	33	38	2	—
	Postnatal asphyxia and atelectasis (762) ...	2,709	100	99	97	2	1	163	226	258	36	5
	Attributed to maternal toxæmia (769) ...	134	100	99	96	4	1	8	11	13	3	0
	Erythroblastosis (770) ...	360	100	99	92	7	1	22	30	33	14	1
	Haemorrhagic disease of newborn (771) ...	219	100	98	87	11	2	13	18	19	14	1
	Ill-defined diseases of early infancy (773) ...	303	100	96	91	5	4	18	24	27	9	3
Immaturity alone, or primary to diseases other than of early infancy (774, 776) ...	2,884	100	99	95	4	1	173	240	269	69	7	

Table LV—continued

Aetiological group	Cause of death (and ICD No.)	Number of infant deaths (under 1 year)	Age distribution per cent of total infant deaths assigned to each cause					Cause distribution per 1,000 total infant deaths in each age-group				
			Infant mortality (under 1 year)	Neonatal mortality			Post neonatal mortality (4 weeks and under 1 year)	Infant mortality (under 1 year)	Neonatal mortality			Post-neonatal mortality (4 weeks and under 1 year)
				Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)			Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)	
	Total causes mainly of postnatal origin ... ..	3,915	100	27	13	14	73	235	89	51	321	601
	Causes classified as infective (001-138) and others mainly infective in origin (340, 391-393, 470-483, 518, 519, 690-698, 765-768)	513	100	26	7	19	74	31	11	3	57	80
	Tuberculosis, other than tuberculous meningitis (001-008, 011-019)	11	100	—	—	—	100	1	—	—	—	2
	Tuberculous meningitis (010)	4	100	—	—	—	100	0	—	—	—	1
	Septicaemia, skin and subcutaneous tissue infections and sepsis of newborn (053, 690-698, 765-768)	78	100	65	19	46	35	5	4	1	21	6
	Whooping cough and measles (056, 085)	39	100	—	—	—	100	2	—	—	—	8
	Meningococcal infections and non-meningococcal meningitis (057, 340)	173	100	29	7	22	71	10	4	1	22	26
	Causes classified as infective not specified above (rem. 001-138)	59	100	25	8	17	75	4	1	0	6	9
	Otitis media and mastoiditis, empyema and pleurisy (391-393, 518, 519)	60	100	10	—	10	90	4	1	—	4	11
	Acute upper respiratory infections and influenza (470-475, 480-483)	89	100	11	3	8	89	5	1	0	4	17
	Pneumonia and bronchitis (490-493, 763, 500-502)	2,611	100	30	15	14	70	157	65	39	219	387
	Gastro-enteritis (including diarrhoea of newborn) (571, 764)	301	100	15	2	13	85	18	4	1	22	54
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	327	100	13	4	9	87	20	3	1	16	60
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985)	80	100	78	70	8	22	5	5	6	4	4
	Other violent causes (rem. E800-E999)	83	100	13	7	6	87	5	1	1	3	15
	Total causes remaining ... ..	856	100	36	24	12	64	51	26	21	59	115
	Neoplasms (140-239)	82	100	23	16	7	77	5	2	1	4	13
	Other remaining causes	774	100	38	25	12	62	47	24	19	55	102

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Immaturity, or with mention of immaturity (774, 776, 760.5-773.5)	6,183	100	99	94	5	1	372	517	573	184	9
Immaturity alone, or primary to diseases other than of early infancy (774, 776)	2,884	100	99	95	4	1	173	240	269	69	7
Immaturity associated with diseases of early infancy (760.5-773.5)	3,299	100	100	94	6	0	198	277	304	115	2
All other causes	10,446	100	55	42	13	45	628	483	427	816	991

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Table LVI. Principal causes of death under 1 year in the neonatal, post-neonatal and other age periods, by sex, per 1,000 live births, 1959, England and Wales

Aetiological group	Cause of death (and ICD No.)	Infant mortality per 1,000 live births									
		Total infant mortality (under 1 year)	Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period		
							Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year
	All causes ... ..	24.51 19.78	17.65 13.98	15.25 11.81	2.40 2.17	6.86 5.80	8.19 6.94	7.06 4.88	2.73 2.10	2.26 1.97	1.87 1.73
96 Prenatal and natal group (including congenital malformations)	Congenital malformations (750-759) ... ..	4.47 4.61	2.76 2.93	1.81 1.95	0.95 0.98	1.71 1.68	0.69 0.89	1.13 1.06	0.85 0.69	0.46 0.52	0.39 0.47
	Total causes mainly of prenatal and natal origin other than congenital malformations ... ..	12.94 9.56	12.84 9.45	12.34 9.04	0.51 0.40	0.10 0.12	7.19 5.73	5.14 3.31	0.09 0.09	0.01 0.02	0.00 0.01
	Intracranial and spinal injury at birth (760) ... ..	2.41 1.46	2.41 1.45	2.25 1.37	0.16 0.08	— 0.01	1.03 0.71	1.22 0.66	— 0.01	— —	— —
	Other birth injury (including maternal antepartum haemorrhage) (761) ... ..	0.63 0.41	0.63 0.41	0.62 0.41	0.01 0.00	— —	0.45 0.32	0.17 0.09	— —	— —	— —
	Postnatal asphyxia and atelectasis (762) ... ..	4.27 2.93	4.24 2.90	4.14 2.83	0.09 0.07	0.03 0.03	2.37 1.79	1.77 1.04	0.02 0.03	0.01 0.00	0.00 —
	Attributed to maternal toxæmia (769) ... ..	0.19 0.16	0.19 0.16	0.19 0.15	0.01 0.01	0.00 —	0.11 0.10	0.08 0.06	0.00 —	— —	— —
	Erythroblastosis (770) ... ..	0.48 0.49	0.47 0.48	0.43 0.45	0.04 0.02	0.01 0.01	0.27 0.32	0.16 0.13	0.01 0.00	— —	— 0.00
	Haemorrhagic disease of newborn (771) ... ..	0.33 0.25	0.33 0.24	0.29 0.22	0.04 0.02	0.00 0.01	0.06 0.08	0.23 0.14	0.00 0.01	— —	— 0.00
	Ill-defined diseases of early infancy (773) ... ..	0.47 0.34	0.45 0.33	0.42 0.31	0.03 0.02	0.02 0.01	0.21 0.17	0.21 0.14	0.02 0.01	— 0.01	— —
	Immaturity alone, or primary to diseases other than of early infancy (774, 776) ... ..	4.17 3.52	4.13 3.47	3.99 3.29	0.14 0.18	0.04 0.05	2.69 2.25	1.30 1.04	0.04 0.04	— 0.01	— —
	Total causes mainly of postnatal origin ... ..	5.85 4.57	1.64 1.19	0.81 0.55	0.82 0.64	4.21 3.38	0.16 0.18	0.65 0.38	1.50 1.16	1.50 1.20	1.21 1.02
97 Postnatal group	Causes classified as infective (001-138) and others mainly infective in origin (340, 391-393, 470-483, 518, 519, 690-698, 765-768) ... ..	0.76 0.61	0.21 0.14	0.06 0.03	0.15 0.11	0.54 0.47	0.01 —	0.06 0.03	0.15 0.10	0.17 0.11	0.22 0.26
	Pneumonia and bronchitis (490-493, 763, 500-502) ... ..	3.88 3.07	1.19 0.87	0.64 0.41	0.55 0.45	2.69 2.20	0.07 0.10	0.57 0.32	1.05 0.80	0.93 0.84	0.72 0.57
	Gastro-enteritis (including diarrhoea of newborn) (571, 764) ... ..	0.49 0.31	0.08 0.04	0.01 0.01	0.07 0.03	0.41 0.27	— —	0.01 0.01	0.14 0.10	0.14 0.08	0.13 0.10
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925) ... ..	0.49 0.38	0.06 0.05	0.02 0.02	0.04 0.03	0.43 0.33	0.01 0.00	0.01 0.02	0.13 0.14	0.21 0.14	0.08 0.05
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985) ... ..	0.10 0.11	0.09 0.08	0.08 0.07	0.01 0.01	0.02 0.03	0.08 0.06	0.01 0.01	0.01 0.01	0.01 0.01	0.00 0.02
	Other violent causes (rem. E800-E999) ... ..	0.13 0.09	0.01 0.02	0.00 0.01	0.01 0.01	0.12 0.07	0.00 0.01	— —	0.02 0.01	0.04 0.02	0.06 0.04
	Total causes remaining ... ..	1.25 1.03	0.41 0.41	0.29 0.26	0.12 0.15	0.83 0.62	0.16 0.14	0.14 0.13	0.28 0.15	0.29 0.23	0.26 0.23
Unclassified	Neoplasms (140-239) ... ..	0.11 0.11	0.02 0.03	0.01 0.02	0.01 0.01	0.09 0.08	0.00 0.01	0.01 0.01	0.03 0.02	0.03 0.02	0.03 0.05
	Other remaining causes ... ..	1.14 0.92	0.39 0.38	0.28 0.24	0.11 0.14	0.75 0.53	0.15 0.13	0.13 0.12	0.26 0.14	0.26 0.21	0.23 0.18
	Immaturity, or with mention of immaturity (774, 776, 760.5-773.5) ... ..	9.38 7.07	9.33 7.01	8.89 6.60	0.44 0.41	0.05 0.06	5.22 4.10	3.67 2.50	0.05 0.05	— 0.01	0.00 —
	Immaturity alone, or primary to diseases other than of early infancy (774, 776) ... ..	4.17 3.52	4.13 3.47	3.99 3.29	0.14 0.18	0.04 0.05	2.69 2.25	1.30 1.04	0.04 0.04	— 0.01	— —
	Immaturity associated with diseases of early infancy (760.5-773.5) ... ..	5.21 3.55	5.20 3.54	4.90 3.31	0.30 0.23	0.01 0.02	2.53 1.85	2.37 1.46	0.01 0.01	— 0.00	0.00 —
	All other causes ... ..	15.13 12.71	8.33 6.97	6.36 5.21	1.97 1.76	6.81 5.73	2.97 2.84	3.39 2.37	2.68 2.05	2.26 1.95	1.87 1.73

Table LVII. Stillbirths per 1,000 total births, and infant deaths per 1,000 live births in the early neonatal, late neonatal and post-neonatal periods, and from the principal causes of infant mortality; comparison of annual and quarterly rates, 1959, England and Wales

Aetiological group	Cause of death (and ICD No.)	Annual rates (per 1,000 live births)	Quarterly rates				Quarterly rates per cent of annual rates			
			Jan. to March	April to June	July to Sept.	Oct. to Dec.	Jan. to March	April to June	July to Sept.	Oct. to Dec.
Stillbirths (late foetal deaths at or over 28 weeks' gestation)		20.80	21.41	21.04	20.45	20.25	103	101	98	97
Early neonatal deaths (infant deaths at ages under 1 week)		13.59	13.59	13.56	12.96	14.28	100	100	95	105
Late neonatal deaths (infant deaths at ages 1 week and under 4 weeks)		2.29	2.73	2.07	2.08	2.26	119	90	91	99
Post-neonatal deaths (infant deaths at 4 weeks and under 1 year)		6.34	8.58	5.51	4.52	6.74	135	87	71	106
Infant deaths (total under 1 year)		22.22	24.90	21.14	19.55	23.27	112	95	88	105
Prenatal and natal group (including congenital malformations)	Congenital malformations (750-759)	4.54	4.60	4.49	4.44	4.63	101	99	98	102
	Total causes mainly of prenatal and natal origin, other than congenital malformations	11.30	11.26	11.21	10.81	11.93	100	99	96	106
	Intracranial and spinal injury at birth (760)	1.95	2.03	2.06	1.73	1.97	104	106	89	101
	Other birth injury (including maternal antepartum haemorrhage) (761)	0.53	0.51	0.46	0.55	0.58	96	87	104	109
	Postnatal asphyxia and atelectasis (762)	3.62	3.51	3.65	3.57	3.75	97	101	99	104
	Attributed to maternal toxæmia (769)	0.18	0.20	0.19	0.19	0.13	111	106	106	72
	Erythroblastosis (770)	0.48	0.48	0.44	0.52	0.49	100	92	108	102
	Haemorrhagic disease of newborn (771)	0.29	0.37	0.25	0.25	0.30	128	86	86	103
	Ill-defined diseases of early infancy (773)	0.40	0.38	0.40	0.38	0.47	95	100	95	118
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	3.85	3.76	3.77	3.62	4.30	98	98	94	112
Postnatal group	Total causes mainly of postnatal origin	5.23	7.79	4.32	3.33	5.42	149	83	64	104
	Causes classified as infective (001-138); others mainly infective in origin (340, 391-393, 470-483, 518, 519, 690-698, 765-768)	0.69	0.98	0.55	0.46	0.76	142	80	67	110
	Pneumonia and bronchitis (490-493, 763, 500-502)	3.49	5.51	2.88	2.04	3.46	158	83	58	99
	Gastro-enteritis and diarrhoea of the newborn (571, 764)	0.40	0.49	0.36	0.31	0.45	122	90	78	112
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	0.44	0.54	0.39	0.33	0.50	123	89	75	114
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985)	0.11	0.11	0.09	0.10	0.13	100	82	91	118
	Other violent causes (rem. E800-E999)	0.11	0.17	0.06	0.10	0.13	155	55	91	118
Unclassified	Total causes remaining	1.14	1.25	1.12	0.97	1.24	110	98	85	109
	Neoplasms (140-239)	0.11	0.10	0.12	0.11	0.10	91	109	100	91
	Other remaining causes	1.03	1.14	1.00	0.86	1.13	111	97	83	110
Immaturity, or with mention of immaturity (774, 776, 760.5-773.5)		8.26	8.23	8.07	7.91	8.87	100	98	96	107
Immaturity alone, or primary to diseases other than of early infancy (774, 776)		3.85	3.76	3.77	3.62	4.30	98	98	94	112
Immaturity associated with diseases of early infancy (760.5-773.5)		4.41	4.48	4.30	4.29	4.57	102	98	97	104
All other causes		13.96	16.66	13.07	11.64	14.41	119	94	83	103

Table LVIII. Infant deaths at various ages per 1,000 live births, and combined stillbirths and infant deaths per 1,000 total births, in standard regions, conurbations, and urban and rural aggregates within regional groups, 1959, England and Wales

	Infant mortality per 1,000 live births										Stillbirths and infant deaths. Rates per 1,000 total births				
	Total infant mortality (under 1 year)	Neo-natal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 year	Stillbirths (late foetal deaths at or over 28 weeks' gestation)	Stillbirths plus infant deaths under 1 week	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year					
<b>ENGLAND AND WALES</b> ...	22.22	15.87	13.59	2.29	6.34	7.58	6.00	2.42	2.11	1.81	42.56	20.80	34.11	8.45	36.34
<b>Urban and rural aggregates:</b>															
Conurbations ...	23.03	16.50	14.17	2.34	6.53	8.12	6.05	2.47	2.31	1.75	42.84	20.28	34.16	8.68	36.45
<i>Areas outside conurbations:</i>															
Urban areas with populations of 100,000 and over ...	23.21	16.27	14.02	2.24	6.95	7.67	6.35	2.61	2.31	2.03	44.43	21.72	35.44	8.99	37.63
Urban areas with populations of 50,000 and under 100,000 ...	22.23	15.79	13.65	2.13	6.45	7.63	6.03	2.48	2.04	1.92	42.86	21.09	34.46	8.40	36.54
Urban areas with populations under 50,000 ...	22.10	15.69	13.32	2.37	6.41	7.24	6.08	2.58	2.06	1.77	43.22	21.60	34.63	8.59	36.95
Rural districts ...	20.17	14.68	12.49	2.19	5.49	6.91	5.58	2.01	1.72	1.76	39.91	20.15	32.39	7.52	34.54
<b>NORTH OF ENGLAND</b>															
<b>Regions:</b>															
Northern ...	25.16	17.98	15.04	2.94	7.17	8.18	6.87	2.58	2.55	2.04	47.02	22.43	37.14	9.89	40.01
East and West Ridings ...	24.32	16.68	14.18	2.50	7.63	8.25	5.94	3.13	2.32	2.18	44.68	20.87	34.76	9.92	37.21
North Western ...	25.24	17.83	15.04	2.79	7.41	8.45	6.59	2.90	2.83	1.68	47.84	23.18	37.87	9.97	40.60
Total ...	24.96	17.54	14.79	2.74	7.42	8.32	6.47	2.89	2.61	1.91	46.73	22.33	36.80	9.93	39.48
<b>Conurbations:</b>															
Tyneside ...	26.79	18.78	15.27	3.51	8.01	7.57	7.70	2.69	3.26	2.07	48.42	22.22	37.15	11.26	40.58
West Yorkshire ...	25.26	17.48	14.94	2.53	7.78	9.55	5.40	3.08	2.68	2.02	45.62	20.89	35.52	10.10	38.00
South East Lancashire ...	25.08	17.43	14.77	2.66	7.66	8.86	5.91	2.73	3.03	1.90	47.52	23.01	37.44	10.08	40.04
Merseyside ...	26.37	19.09	15.89	3.20	7.27	8.98	6.91	3.16	2.76	1.35	48.17	22.40	37.93	10.24	41.06
Total ...	25.69	18.04	15.16	2.88	7.64	8.87	6.29	2.92	2.91	1.81	47.35	22.23	37.05	10.29	39.87
<i>Areas outside conurbations:</i>															
Urban areas with populations of 100,000 and over ...	24.57	17.41	14.80	2.61	7.16	7.87	6.92	2.92	2.14	2.10	47.49	23.50	37.95	9.54	40.50
Urban areas with populations of 50,000 and under 100,000 ...	24.43	17.94	14.70	3.24	6.49	8.16	6.54	2.70	2.27	1.51	45.32	21.42	35.80	9.52	38.98
Urban areas with populations under 50,000 ...	24.73	16.64	14.07	2.57	8.09	7.45	6.62	3.27	2.88	1.94	47.37	23.22	36.97	10.41	39.47
Rural districts ...	23.34	17.01	14.66	2.35	6.33	8.23	6.43	2.25	1.80	2.29	43.61	20.75	35.10	8.50	37.40

Table LVIII—continued

	Infant mortality per 1,000 live births										Stillbirths and infant deaths. Rates per 1,000 total births				
	Total infant mortality (under 1 year)	Neo-natal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 year	Stillbirths (late foetal deaths at or over 28 weeks' gestation)	Stillbirths plus infant deaths under 1 week	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year					
<b>MIDLANDS AND EASTERN</b>															
<b>Regions:</b>															
North Midland ... ..	21.85	15.16	12.98	2.18	6.69	6.99	5.99	2.30	2.36	2.03	42.58	21.19	33.90	8.68	36.03
Midland ... ..	23.34	16.58	14.40	2.18	6.76	7.51	6.89	2.36	2.42	1.98	45.69	22.88	36.95	8.74	39.08
Eastern ... ..	18.64	13.59	11.73	1.86	5.05	6.35	5.37	1.78	1.60	1.67	36.81	18.52	30.03	6.78	31.85
<b>Total ... ..</b>	<b>21.45</b>	<b>15.24</b>	<b>13.15</b>	<b>2.08</b>	<b>6.22</b>	<b>7.00</b>	<b>6.16</b>	<b>2.16</b>	<b>2.15</b>	<b>1.90</b>	<b>42.05</b>	<b>21.04</b>	<b>33.92</b>	<b>8.13</b>	<b>35.96</b>
<b>Conurbation:</b>															
West Midlands ... ..	23.78	16.74	14.39	2.35	7.04	7.48	6.92	2.27	2.63	2.14	45.75	22.50	36.57	9.18	38.87
<b>Areas outside conurbation:</b>															
Urban areas with populations of 100,000 and over ... ..	22.33	15.38	13.27	2.11	6.94	7.56	5.71	2.46	2.49	1.99	41.32	19.42	32.44	8.88	34.51
Urban areas with populations of 50,000 and under 100,000 ... ..	21.10	14.35	12.79	1.56	6.75	6.90	5.89	2.27	2.17	2.32	41.57	20.91	33.44	8.14	34.96
Urban areas with populations under 50,000 ... ..	21.22	15.57	13.56	2.01	5.65	6.93	6.63	2.03	1.96	1.66	41.66	20.89	34.16	7.50	36.13
Rural districts ... ..	19.58	14.06	11.93	2.14	5.52	6.41	5.52	1.99	1.79	1.75	40.37	21.20	32.88	7.49	34.97
<b>GREATER LONDON ... ..</b>	<b>20.45</b>	<b>15.07</b>	<b>13.22</b>	<b>1.85</b>	<b>5.38</b>	<b>7.65</b>	<b>5.57</b>	<b>2.13</b>	<b>1.68</b>	<b>1.58</b>	<b>37.95</b>	<b>17.87</b>	<b>30.85</b>	<b>7.10</b>	<b>32.67</b>
<b>SOUTH OF ENGLAND</b>															
<b>Regions:</b>															
London and South Eastern (excluding Greater London) ... ..	19.11	13.72	11.79	1.93	5.39	6.56	5.23	1.98	1.46	1.96	37.33	18.57	30.14	7.19	32.04
Southern ... ..	18.86	13.30	11.34	1.96	5.55	7.30	4.04	2.28	1.60	1.67	36.57	18.05	29.19	7.38	31.12
South Western ... ..	19.08	13.65	11.84	1.80	5.43	6.85	4.99	2.21	1.69	1.54	38.41	19.70	31.31	7.09	33.08
<b>Total ... ..</b>	<b>19.02</b>	<b>13.56</b>	<b>11.66</b>	<b>1.90</b>	<b>5.46</b>	<b>6.92</b>	<b>4.74</b>	<b>2.17</b>	<b>1.59</b>	<b>1.70</b>	<b>37.48</b>	<b>18.82</b>	<b>30.26</b>	<b>7.22</b>	<b>32.12</b>
Urban areas with populations of 100,000 and over ... ..	21.02	14.65	13.04	1.61	6.37	7.72	5.32	2.35	1.74	2.27	40.63	20.04	32.81	7.82	34.40
Urban areas with populations of 50,000 and under 100,000 ... ..	20.11	14.36	12.75	1.61	5.74	7.81	4.94	2.30	1.61	1.84	41.26	21.58	34.06	7.19	35.64
Urban areas with populations under 50,000 ... ..	18.64	13.17	11.12	2.05	5.47	6.70	4.42	2.37	1.53	1.57	36.60	18.30	29.22	7.38	31.23
Rural districts ... ..	18.11	13.16	11.19	1.97	4.95	6.46	4.73	1.83	1.58	1.54	35.61	17.82	28.81	6.79	30.75
<b>WALES (including Monmouthshire)</b>															
Wales I (South East) ... ..	27.10	20.17	16.87	3.30	6.93	8.35	8.52	2.95	2.30	1.68	53.70	27.34	43.75	9.95	46.96
Wales II (remainder) ... ..	24.25	18.10	14.85	3.25	6.15	7.91	6.94	2.28	1.85	2.02	47.27	23.59	38.09	9.18	41.26
Urban areas with populations of 100,000 and over ... ..	27.04	19.41	16.39	3.01	7.63	7.35	9.04	2.83	3.39	1.41	51.96	25.61	41.59	10.37	44.52
Urban area with population of 50,000 and under 100,000 ... ..	41.12	29.09	27.08	2.01	12.04	9.03	18.05	6.02	3.01	3.01	72.74	32.98	59.17	13.58	61.11
Urban areas with populations under 50,000 ... ..	27.12	20.37	16.61	3.76	6.75	9.04	7.57	2.89	1.69	2.18	54.56	28.21	44.35	10.21	48.00
Rural districts ... ..	23.36	17.90	14.97	2.93	5.45	7.73	7.24	2.28	1.79	1.38	46.40	23.60	38.22	8.18	41.08

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Table LIX. Infant deaths per 1,000 live births in regional groups from the principal causes of infant mortality; regional group rates as percentages of corresponding national rates, 1959, England and Wales

Aetiological group	Cause of death (and ICD No.)	Rates per 1,000 live births					Regional group rates per cent of England and Wales rate			
		England and Wales	North of England	Midlands and Eastern	South of England	Wales	North of England	Midlands and Eastern	South of England	Wales
	All causes ... ..	22.22	24.96	21.45	19.70	26.34	112	97	89	119
102 Prenatal and natal group (including congenital malformations)	Congenital malformations (750-759) ... ..	4.54	4.90	4.45	4.09	5.77	108	98	90	127
	Total causes mainly of prenatal and natal origin other than congenital malformations ... ..	11.30	12.33	10.60	10.40	14.53	109	94	92	129
	Intracranial and spinal injury at birth (760) ... ..	1.95	2.21	2.02	1.62	2.18	113	104	83	112
	Other birth injury (including maternal antepartum haemorrhage) (761) ... ..	0.53	0.47	0.51	0.54	0.78	89	96	102	147
	Postnatal asphyxia and atelectasis (762) ... ..	3.62	3.89	3.39	3.18	5.94	107	94	88	164
	Attributed to maternal toxæmia (769) ... ..	0.18	0.15	0.20	0.20	0.12	83	111	111	67
	Erythroblastosis (770) ... ..	0.48	0.52	0.49	0.46	0.38	108	102	96	79
	Haemorrhagic disease of newborn (771) ... ..	0.29	0.37	0.25	0.25	0.28	128	86	86	97
	Ill-defined diseases of early infancy (773) ... ..	0.40	0.47	0.37	0.37	0.45	118	92	92	112
Immaturity alone, or primary to diseases other than of early infancy (774, 776) ... ..	3.85	4.25	3.36	3.78	4.40	110	87	98	114	
	Total causes mainly of postnatal origin ... ..	5.23	6.49	5.28	4.12	4.90	124	101	79	94
Postnatal group	Causes classified as infective (001-138) and others mainly infective in origin (340, 391-393, 470-483, 518, 519, 690-698, 765-768) ... ..	0.69	0.84	0.72	0.53	0.64	122	104	77	93
	Tuberculosis, other than tuberculous meningitis (001-008, 011-019) ... ..	0.01	0.02	0.00	0.01	0.07	200	40	100	700
	Tuberculous meningitis (010) ... ..	0.01	0.00	—	0.01	0.02	40	—	100	200

103 Postnatal group-(contd.)	Septicaemia, skin and subcutaneous tissue infections and sepsis of newborn (053, 690-698, 765-768) ... ..	0.10	0.13	0.10	0.09	0.02	130	100	90	20
	Whooping cough and measles (056, 085) ... ..	0.05	0.09	0.04	0.03	—	180	80	60	—
	Meningococcal infections and non-meningococcal meningitis (057, 340) ... ..	0.23	0.26	0.24	0.18	0.35	113	104	78	152
	Causes classified as infective not specified above (rem. 001-138) ... ..	0.08	0.08	0.08	0.08	0.02	100	100	100	25
	Otitis media and mastoiditis, empyema and pleurisy (391-393, 518, 519) ... ..	0.08	0.11	0.08	0.06	0.05	138	100	75	62
	Acute upper respiratory infections, and influenza (470-475, 480-483) ... ..	0.12	0.14	0.16	0.07	0.09	117	133	58	75
	Pneumonia and bronchitis (490-493, 763, 500-502) ... ..	3.49	4.24	3.53	2.85	3.08	121	101	82	88
	Gastro-enteritis (including diarrhoea of newborn) (571, 764) ... ..	0.40	0.61	0.33	0.25	0.52	152	82	62	130
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925) ... ..	0.44	0.61	0.41	0.28	0.57	139	93	64	130
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985) ... ..	0.11	0.11	0.15	0.08	0.02	100	136	73	18
Other violent causes (rem. E800-E999) ... ..	0.11	0.08	0.14	0.12	0.07	73	127	109	64	
	Total causes remaining ... ..	1.14	1.23	1.12	1.09	1.14	108	98	96	100
Unclassified	Neoplasms (140-239) ... ..	0.11	0.10	0.10	0.13	0.05	91	91	118	45
	Other remaining causes ... ..	1.03	1.13	1.01	0.96	1.09	110	98	93	106
	Immaturity, or with mention of immaturity (774, 776, 760.5-773.5) ... ..	8.26	9.17	7.51	7.60	10.86	111	91	92	131
	Immaturity alone, or primary to diseases other than of early infancy (774, 776) ... ..	3.85	4.25	3.36	3.78	4.40	110	87	98	114
	Immaturity associated with diseases of early infancy (760.5-773.5) ... ..	4.41	4.92	4.14	3.82	6.46	112	94	87	146
	All other causes ... ..	13.96	15.78	13.95	12.10	15.47	113	100	87	111

Table LX. Trend of stillbirths per 1,000 total births, and of deaths in the neonatal, and post-neonatal periods per 1,000 live births\*, in standard regions, 1955 to 1959, England and Wales

		Rates in each year 1955 to 1959					Rates in 1956 to 1959 per cent of rate in 1955			
		1955	1956	1957	1958	1959	1956	1957	1958	1959
Stillbirths (at or over 28 weeks' gestation) per 1,000 total births	ENGLAND AND WALES	23.5	22.9	22.5	21.5	20.8	97	96	91	89
	NORTH OF ENGLAND	25.3	24.7	25.0	23.5	22.3	98	99	93	88
	Northern ... ..	24.7	24.8	25.6	23.0	22.4	100	104	93	91
	East and West Ridings ...	24.8	22.7	23.5	22.7	20.9	92	95	92	84
	North Western ... ..	26.0	25.8	25.7	24.4	23.2	99	99	94	89
	MIDLANDS AND EASTERN	23.3	23.2	21.9	21.7	21.0	100	94	93	90
	North Midland ... ..	24.3	24.8	22.0	22.9	21.2	102	91	94	87
	Midland ... ..	24.5	24.1	23.0	23.0	22.9	98	94	94	93
	Eastern ... ..	20.7	20.4	20.4	18.8	18.5	99	99	91	89
	SOUTH OF ENGLAND	20.2	20.4	19.9	18.8	18.4	101	99	93	91
	London and South Eastern	19.5	19.3	19.6	18.7	18.0	99	101	96	92
	Southern ... ..	20.5	20.9	19.3	17.4	18.1	102	94	85	88
	South Western ... ..	22.2	23.3	21.4	20.4	19.7	105	96	92	89
WALES (including Monmouthshire) ...	28.3	26.8	25.8	26.3	26.3	95	91	93	93	
Neonatal mortality per 1,000 live births	ENGLAND AND WALES	17.3	16.8	16.5	16.2	15.9	97	95	94	92
	NORTH OF ENGLAND	19.2	18.7	17.7	18.1	17.5	97	92	94	91
	Northern ... ..	21.3	18.9	18.6	18.6	18.0	89	87	87	85
	East and West Ridings ...	17.3	18.5	17.2	17.2	16.7	107	99	99	97
	North Western ... ..	19.2	18.6	17.5	18.4	17.8	97	91	96	93
	MIDLANDS AND EASTERN	16.7	16.6	16.2	15.4	15.2	99	97	92	91
	North Midland ... ..	17.0	16.9	16.4	15.8	15.2	99	96	93	89
	Midland ... ..	18.0	17.6	17.6	16.9	16.6	98	98	94	92
	Eastern ... ..	14.6	14.8	14.1	13.1	13.6	101	97	90	93
	SOUTH OF ENGLAND	15.4	14.8	14.9	14.5	14.3	96	97	94	93
	London and South Eastern	15.2	14.6	14.8	14.4	14.7	96	97	95	97
	Southern ... ..	15.8	15.0	14.8	14.8	13.3	95	94	94	84
	South Western ... ..	15.5	15.0	15.7	14.7	13.6	97	101	95	88
WALES (including Monmouthshire) ...	20.8	20.6	20.0	18.9	19.6	99	96	91	94	
Post-neonatal mortality per 1,000 live births	ENGLAND AND WALES	7.6	6.9	6.7	6.4	6.3	91	88	84	83
	NORTH OF ENGLAND	9.0	8.2	8.1	7.3	7.4	91	90	81	82
	Northern ... ..	9.9	8.2	8.2	7.0	7.2	83	83	71	73
	East and West Ridings ...	8.9	7.7	7.8	7.2	7.6	87	88	81	85
	North Western ... ..	8.7	8.4	8.3	7.6	7.4	97	95	87	85
	MIDLANDS AND EASTERN	7.7	6.8	6.5	6.2	6.2	88	84	81	81
	North Midland ... ..	8.7	7.4	6.6	6.8	6.7	85	76	78	77
	Midland ... ..	8.1	7.2	7.0	6.7	6.8	89	86	83	84
	Eastern ... ..	6.0	5.8	5.7	5.0	5.0	97	95	83	83
	SOUTH OF ENGLAND	5.9	5.6	5.2	5.4	5.4	95	88	92	92
	London and South Eastern	6.0	5.7	5.1	5.2	5.4	95	85	87	90
	Southern ... ..	5.8	5.6	5.4	5.5	5.6	97	93	95	97
	South Western ... ..	5.7	5.2	5.3	6.2	5.4	91	93	109	95
WALES (including Monmouthshire) ...	10.6	8.2	8.4	7.6	6.7	77	79	72	63	

\* Rates prior to 1957 per 1,000 related live births.



Table LXI. Maternal mortality: Deaths from principal causes, and associated maternal mortality, 1931 to 1959, England and Wales

ICD No.	MATERNAL MORTALITY (complications of pregnancy, childbirth and puerperium, including abortion)										ASSOCIATED MATERNAL MORTALITY				Total attributed, to, or associated with, maternal causes				
	Puerperal phlebitis, thrombosis and embolism	Puerperal sepsis	Antepartum haemorrhage	Postpartum haemorrhage	Toxaemia	Prolonged labour	Trauma, shock: other complication of delivery	Other causes	Total maternal causes other than abortion	Abortion				Total* maternal mortality		Associated with maternal causes other than abortion	Associated with abortion	Total associated mortality	
										Criminal abortion		Spontaneous and other							Abortion all forms
	682, 684	640, 641, 681	643, 644, 670	671, 672	642, 685, 686	673-675	676-678	Rem. 640-648 660-689	651·2	650·2 652·2	Rem. 651	Rem. 650, 652	650-652	640-689					
1931	215	712	330	494	507	2,258	52	27	229	140	448	2,706	834	77	911	3,617			
1932	226	628	334	511	514	2,213	46	23	262	139	470	2,683	623	90	713	3,396			
1933	206	694	310	508	533	2,251	56	29	257	144	486	2,737	731	97	828	3,565			
1934	188	800	304	538	537	2,367	67	33	295	118	513	2,880	683	64	747	3,627			
1935	192	647	292	488	507	2,126	64	30	262	108	464	2,590	638	74	712	3,302			
1936	183	561	302	510	455	2,011	49	24	242	105	420	2,431	541	70	611	3,042			
1937	152	347	307	510	457	1,773	56	28	176	109	369	2,142	585	104	689	2,831			
1938	178	277	312	472	503	1,742	54	26	173	101	354	2,096	449	81	530	2,626			
1939	154	248	117	179	478	467	1,643	80	28	167	79	354	1,997	429	49	478	2,475		
1940	134	195	106	180	398	125	111	124	1,373	43	33	116	76	268	1,641	368	56	424	2,065
1941	134	141	101	210	381	155	109	122	1,353	66	24	145	90	325	1,678	358	47	405	2,083
1942	128	151	87	198	410	158	94	133	1,359	64	12	175	62	313	1,672	363	49	412	2,084
1943	136	132	86	187	375	165	106	112	1,299	76	15	166	64	321	1,620	437	57	494	2,114
1944	107	105	84	179	328	176	87	113	1,179	75	7	168	63	313	1,492	383	52	435	1,927
1945	86	82	68	158	321	148	72	92	1,027	65	9	109	50	233	1,260	342	19	361	1,621
1946	102	53	85	162	359	117	83	91	1,052	41	5	69	42	157	1,209	353	37	390	1,599
1947	110	33	56	156	312	110	63	77	917	37	3	54	49	143	1,060	264	44	308	1,368
1948	67	33	46	115	249	66	55	55	686	34	4	55	32	125	811	231	16	247	1,058
1949	56	32	38	90	199	69	60	65	609	20	9	58	31	118	727	157	19	176	903
1950	62	26	44	38	185	42	54	66	517	25	21	39	18	103	620	180	21	201	821
1951	49	16	35	53	141	38	37	50	419	33	26	34	14	107	526	151	9	160	686
1952	52	10	19	39	122	32	43	56	373	19	28	28	15	90	463	153	8	161	624
1953	49	17	39	51	143	31	34	55	419	17	24	22	13	76	495	121	7	128	623
1954	51	13	32	44	104	32	41	53	370	10	25	22	19	76	446	116	5	121	567
1955	55	17	24	41	91	31	23	57	339	17	15	19	15	66	405	108	7	115	520
1956	32	13	33	24	93	34	15	58	302	20	16	20	16	72	374	119	6	125	499
1957	32	18	27	22	77	27	23	46	272	15	15	18	13	61	333	122	6	128	461
1958	40	13	25	33	66	21	20	47	265	8	12	27	16	63	328	94	4	98	426
1959	30	17	21	23	57	18	26	51	243	13	10	16	8	47	290	75	7	82	372

\* Note. Excludes the following cases in which it was stated that death followed the maternal condition after an interval of more than 12 months: 1951-40, 1952-35, 1953-32, 1954-34, 1955-34, 1956-25, 1957-16, 1958-22, 1959-21.

Table LXII. Maternal mortality, distinguishing principal causes, and associated maternal mortality. Death rates per 100,000 total births, 1931 to 1959, England and Wales

ICD No.	MATERNAL MORTALITY (complications of pregnancy, childbirth and puerperium, including abortion)														ASSOCIATED MATERNAL MORTALITY			Total attributed to, or associated with, maternal causes	
	Puerperal phlebitis, thrombosis and embolism	Puerperal sepsis	Antepartum haemorrhage	Postpartum haemorrhage	Toxaemia	Prolonged labour	Trauma, shock: other complication of delivery	Other causes	Total maternal causes other than abortion	Abortion				Abortion all forms	Total* maternal mortality	Associated with maternal causes other than abortion	Associated with abortion		Total associated mortality
										Criminal abortion		Spontaneous and other							
										With sepsis	Without mention of sepsis	With sepsis	Without mention of sepsis						
	682, 684	640, 641, 681	643, 644, 670	671, 672	642, 685, 686	673-675	676-678	Rem. 640-648 660-689	640-648 660-689	651·2	650·2 652·2	Rem. 651	Rem. 650, 652	650-652	640-689				
1931	33	108	50	75	77			343	8	4	35	21	68	411	127	12	138	549	
1932	35	98	52	80	80			346	7	4	41	22	73	419	97	14	111	530	
1933	34	115	51	84	88			372	9	5	42	24	80	452	121	16	137	589	
1934	30	128	49	86	86			380	11	5	47	19	82	462	110	10	120	582	
1935	31	104	47	78	81			341	10	5	42	17	74	415	102	12	114	529	
1936	29	89	48	81	72			319	8	4	38	17	67	386	86	11	97	483	
1937	24	55	48	80	72			279	9	4	28	17	58	337	92	16	108	446	
1938	28	43	48	73	78			270	8	4	27	16	55	324	70	13	82	407	
1939	24	39	18 28	75	73			257	13	4	26	12	55	313	67	8	75	387	
1940	22	32	17 29	65	20 18 20			224	7	5	19	12	44	268	60	9	69	337	
1941	22	24	17 35	64	26 18 20			226	11	4	24	15	54	280	60	8	68	347	
1942	19	22	13 29	61	23 14 20			202	9	2	26	9	46	248	54	7	61	309	
1943	19	19	12 27	53	23 15 16			184	11	2	24	9	45	230	62	8	70	300	
1944	14	14	11 23	42	23 11 15			153	10	1	22	8	41	193	50	7	56	249	
1945	12	12	10 23	46	21 10 13			147	9	1	16	7	33	180	49	3	52	232	
1946	12	6	10 19	43	14 10 11			125	5	1	8	5	19	143	42	4	46	190	
1947	12	4	6 17	35	12 7 9			102	4	0	6	5	16	117	29	5	34	152	
1948	8	4	6 14	31	8 7 7			86	4	1	7	4	16	102	29	2	31	133	
1949	7	4	5 12	27	9 8 9			81	3	1	8	4	16	97	21	3	24	121	
1950	9	4	6 5	26	6 8 9			72	4	3	5	3	14	87	25	3	28	115	
1951	7	2	5 8	20	5 5 7			60	5	4	5	2	15	76	22	1	23	99	
1952	8	1	3 6	18	5 6 8			54	3	4	4	2	13	67	22	1	23	91	
1953	7	2	6 7	20	4 5 8			60	2	3	3	2	11	71	17	1	18	89	
1954	7	2	5 6	15	5 6 8			54	1	4	3	3	11	65	17	1	18	82	
1955	8	2	4 6	13	5 3 8			50	2	2	3	2	10	59	16	1	17	76	
1956	4	2	5 3	13	5 2 8			42	3	2	3	2	10	52	17	1	17	70	
1957	4	2	4 3	10	4 3 6			37	2	2	2	2	8	45	16	1	17	62	
1958	5	2	3 4	9	3 3 6			35	1	2	4	2	8	43	12	1	13	56	
1959	4	2	3 3	7	2 3 7			32	2	1	2	1	6	38	10	1	11	49	

No.e. Figures for 1931 to 1938 are based on live and still birth registrations, and from 1939 onwards on occurrences.

\* See footnote to Table LXI.

Table LXIII. Maternal mortality: Deaths attributed to or associated with abortion, 1931 to 1959, England and Wales

	Spontaneous or induced for therapeutic reasons		Induced for non-therapeutic reasons		Total attributed to abortion (including criminal)	Others associated with abortion	Total attributed to, or associated with, abortion	Percentage of deaths due to abortion which had mention of sepsis
	With sepsis	Without sepsis	With sepsis	Without sepsis*				
1931 ...	229	140	52	27	448	77	525	63
1932 ...	262	139	46	23	470	90	560	66
1933 ...	257	144	56	29	486	97	583	64
1934 ...	295	118	67	33	513	64	577	71
1935 ...	262	108	64	30	464	74	538	70
1936 ...	242	105	49	24	420	70	490	69
1937 ...	176	109	56	28	369	104	473	63
1938 ...	173	101	54	26	354	81	435	64
1939 ...	167	79	80	28	354	49	403	70
1940 ...	116	76	43	33	268	56	324	59
1941 ...	145	90	66	24	325	47	372	65
1942 ...	175	62	64	12	313	49	362	76
1943 ...	166	64	76	15	321	57	379	75
1944 ...	168	63	75	7	313	52	367	78
1945 ...	109	50	65	9	233	19	253	75
1946 ...	69	42	41	5	157	37	194	70
1947 ...	54	49	37	3	143	44	184	64
1948 ...	55	32	34	4	125	16	139	71
1949 ...	58	31	20	9	118	19	137	66
1950 ...	39	18	25	21	103	21	124	62
1951 ...	34	14	33	26	107	9	116	63
1952 ...	28	15	19	28	90	8	98	52
1953 ...	22	13	17	24	76	7	83	51
1954 ...	22	19	10	25	76	5	81	42
1955 ...	19	15	17	15	66	7	75	56
1956 ...	20	16	20	16	72	6	78	56
1957 ...	18	13	15	15	61	6	67	54
1958 ...	27	16	8	12	63	4	67	56
1959 ...	16	8	13	10	47	7	54	62

\* Deaths due to attempted abortion, formerly classed to accidental causes, are included for years 1950 onwards.

Table LXIV. Death rates from maternal causes\* (including abortion) per 100,000 total births† in England and Wales and four regional groups,‡ 1921 to 1959

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	England and Wales			North of England			Midlands and Eastern			South of England			Wales (including Monmouthshire)		
	Total	Sepsis	Other	Total	Sepsis	Other	Total	Sepsis	Other	Total	Sepsis	Other	Total	Sepsis	Other
1921 ... ..	391	138	253	450	158	292	331	115	216	338	129	210	535	167	368
1922 ... ..	381	138	243	421	154	267	339	120	219	330	128	201	543	175	368
1923 ... ..	381	130	252	422	136	286	358	126	232	307	118	189	542	159	383
1924 ... ..	390	139	251	440	156	284	339	130	209	344	122	222	514	158	355
1925 ... ..	408	156	252	469	173	297	368	155	213	346	134	212	497	158	339
1926 ... ..	412	160	252	475	179	296	377	154	224	343	140	203	492	163	329
1927 ... ..	411	157	254	473	173	300	361	148	213	343	144	199	578	164	414
1928 ... ..	425	172	252	472	186	286	373	161	212	382	157	225	579	207	372
1929 ... ..	416	173	243	469	194	275	370	150	220	363	170	193	558	180	377
1930 ... ..	422	184	238	496	203	293	380	173	207	347	168	179	530	196	334
1931 ... ..	395	159	235	446	170	275	352	147	205	350	155	195	513	178	334
1932 ... ..	404	155	249	440	171	270	374	151	223	345	135	210	591	169	423
1933 ... ..	432	175	257	497	193	304	385	169	216	370	152	218	575	206	369
1934 ... ..	441	195	247	494	204	290	405	199	206	359	154	205	661	275	386
1935 ... ..	394	161	232	434	172	262	370	160	209	320	130	190	589	227	362
1936 ... ..	365	134	231	436	153	283	331	123	208	280	104	176	517	205	312
1937 ... ..	313	94	219	364	109	254	283	90	192	254	69	185	454	133	321
1938 ... ..	297	86	211	342	102	240	271	72	199	235	75	160	457	124	333
1939 ... ..	284	75	210	327	88	239	259	70	188	219	58	161	437	86	351
1940 ... ..	268	81	186	294	82	211	252	82	170	222	72	149	339	90	250
1941 ... ..	280	83	196	304	83	220	258	78	180	253	82	171	374	108	266
1942 ... ..	248	77	171	266	92	174	248	72	177	223	67	156	292	85	207
1943 ... ..	229	73	155	246	79	167	214	63	151	210	71	139	303	98	205
1944 ... ..	192	59	133	216	67	149	162	50	112	180	53	127	267	97	170
1945 ... ..	180	49	131	200	58	142	169	44	125	153	41	112	279	61	219
1946 ... ..	143	31	112	152	38	115	125	24	101	133	28	105	226	43	183
1947 ... ..	117	26	91	119	25	94	119	26	93	108	28	80	163	17	146
1948 ... ..	102	24	78	106	21	85	94	21	73	92	25	67	173	37	136
1949 ... ..	97	22	76	104	23	81	91	16	74	90	22	67	136	33	103

1950 ... ..	87	21	66	90	21	69	82	24	57	76	16	60	155	41	114
1951 ... ..	82	20	62	96	20	75	64	16	49	74	22	52	123	19	104
1952 ... ..	72	16	56	69	12	57	67	15	52	78	18	60	78	26	52
1953 ... ..	75	16	60	72	15	57	68	13	55	80	19	62	94	16	77
1954 ... ..	70	14	56	72	16	57	74	15	59	60	11	49	94	17	77
1955 ... ..	64	17	48	76	21	55	56	12	44	55	15	40	90	22	67
1956 ... ..	56	13	43	59	12	47	57	16	40	48	9	38	81	19	62
1957 ... ..	47	11	36	47	9	38	45	10	35	46	13	32	68	21	47
1958 ... ..	43	12	32	43	13	30	39	9	29	45	12	33	57	14	44
1959 ... ..	38	10	28	42	12	30	28	5	22	41	12	29	41	9	32

\* Note. The deaths shown for each year in this table are based on the method of classification in use at the time, the International List Numbers being as follows: 1921-30, Total=Nos. 143-150 (Sepsis=No. 146) of the 3rd Revision (1920) List; 1931-39, Total=Nos. 140-150 (Sepsis=Nos. 140, 145) of the 4th Revision (1929) List; 1940-49, Total=Nos. 140-150 (Sepsis=Nos. 140, 147) of the 5th Revision (1939) List; 1950-57, Total=Nos. 640-689 (Sepsis=Nos. 640, 641, 651, 681, 682, 684) of the 6th Revision (1948) List; 1958 onwards, 7th Revision (1955) List, Nos. as for 1950-57. Deaths due to criminal abortion are excluded from this table for years prior to 1940.

† 1921-28, registered live births only; 1929-38, registered live and still births; 1939 onwards, live and still birth occurrences.

‡ The composition of the three English groups is as follows: North of England: Northern, East and West Ridings and North Western Regions; Midlands and Eastern: North Midland, Midland and Eastern Regions; South of England: London and South Eastern, Southern and South Western Regions.

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Table LXV. Deaths of women certified as due to pregnancy or childbearing, by age and cause, 1959, England and Wales

ICD No.	Cause of death	All ages	Under 20	20-	25-	30-	35-	40-	45 and over
640-648	Complications of pregnancy ...	96	4	16	33	14	19	10	—
640	Pyelitis and pyelonephritis of pregnancy	2	—	—	1	1	—	—	—
641	Other infections of genito-urinary tract during pregnancy	1	—	—	1	—	—	—	—
642	Toxaemias of pregnancy	50	2	8	16	9	8	7	—
643	Placenta praevia	—	—	—	—	—	—	—	—
644	Other haemorrhage of pregnancy	3	1	—	1	1	—	—	—
645	Ectopic pregnancy	12	—	1	4	1	6	—	—
646	Anaemia of pregnancy	1	—	1	—	—	—	—	—
647	Pregnancy with malposition of foetus in uterus	—	—	—	—	—	—	—	—
648	Other complications arising from pregnancy	27	1	6	10	2	5	3	—
650-652	Abortion ...	47	1	11	13	6	11	5	—
650	Abortion without mention of sepsis or toxæmia	16	—	5	6	1	2	2	—
651	Abortion with sepsis	29	1	6	6	4	9	3	—
652	Abortion with toxæmia, without mention of sepsis	2	—	—	1	1	—	—	—
660	Delivery without mention of complication	4	—	—	2	1	1	—	—
670-678	Delivery with specified complication ...	85	1	13	23	22	17	9	—
670	Delivery complicated by placenta praevia or antepartum haemorrhage	18	—	2	4	6	3	3	—
671	Delivery complicated by retained placenta	3	—	1	—	2	—	—	—
672	Delivery complicated by other postpartum haemorrhage	20	—	2	7	4	5	2	—
673	Delivery complicated by abnormality of bony pelvis	1	—	1	—	—	—	—	—
674	Delivery complicated by disproportion or malposition of foetus	7	—	—	3	1	1	2	—
675	Delivery complicated by prolonged labour of other origin	10	—	3	1	4	2	—	—
676	Delivery with laceration of perineum, without mention of other laceration	—	—	—	—	—	—	—	—
677	Delivery with other trauma	7	—	—	2	3	2	—	—
678	Delivery with other complications of childbirth	19	1	4	6	2	4	2	—
680-689	Complications of the puerperium ...	58	3	11	16	10	13	4	1
680	Puerperal urinary infection without other sepsis	—	—	—	—	—	—	—	—
681	Sepsis of childbirth and the puerperium	14	—	2	5	5	—	2	—
682	Puerperal phlebitis and thrombosis	19	1	3	5	3	6	1	—
683	Pyrexia of unknown origin during the puerperium	—	—	—	—	—	—	—	—
684	Puerperal pulmonary embolism	11	—	1	4	1	4	—	1
685	Puerperal eclampsia	6	—	3	1	—	1	1	—
686	Other forms of puerperal toxæmia	1	—	—	—	—	1	—	—
687	Cerebral haemorrhage in the puerperium	3	1	1	—	1	—	—	—
688	Other and unspecified complications of the puerperium	4	1	1	1	—	1	—	—
689	Mastitis and other disorders of lactation	—	—	—	—	—	—	—	—
640-648 660-689	Deliveries and complications of pregnancy, childbirth, and the puerperium (excluding abortion)	243	8	40	74	47	50	23	1
640-689	Deliveries and complications of pregnancy, childbirth, and the puerperium (including abortion)	290	9	51	87	53	61	28	1

Note: Excludes 21 cases in which it was stated that death followed the maternal condition after an interval of more than 12 months.

Table LXVI. Deaths of women not classed to pregnancy or childbearing, but certified as associated therewith, 1959, England and Wales

ICD No.	Cause of death	All ages	15-	20-	25-	30-	35-	40-	45 and over
002	Pulmonary tuberculosis	1	—	—	—	1	—	—	—
046·1	Amoebiasis, with liver abscess	1	—	—	—	1	—	—	—
063	Clostridium welchii infection	1	1	—	—	—	—	—	—
081	Acute anterior poliomyelitis (late effects)	1	—	—	—	—	1	—	—
140-199	Malignant neoplasms	7	—	3	2	1	1	—	—
204·3	Acute myeloid leukaemia	1	1	—	—	—	—	—	—
214	Uterine fibromyoma	1	—	—	—	1	—	—	—
241	Asthma	1	—	—	1	—	—	—	—
260	Diabetes mellitus	1	—	—	—	1	—	—	—
272	Pituitary necrosis	1	—	—	1	—	—	—	—
330-334	Vascular lesions affecting central nervous system	4	—	—	2	1	—	1	—
340·3	Acute purulent meningitis (non-meningococcal)	1	—	—	—	—	1	—	—
401·3	Acute rheumatic heart disease	1	—	—	—	1	—	—	—
410	Diseases of mitral valve	11	—	1	3	3	3	1	—
416	Other heart disease, specified as rheumatic	3	1	—	1	1	—	—	—
420·1	Coronary artery disease	1	—	—	1	—	—	—	—
422·2	Myocardial hypertrophy	1	—	—	—	—	1	—	—
434·4	Pulmonary hypertension	1	—	—	1	—	—	—	—
443	Unspecified hypertensive heart disease	1	—	—	—	—	1	—	—
444	Essential benign hypertension	1	—	—	—	—	—	1	—
445	Malignant hypertension	1	—	1	—	—	—	—	—
452	Aneurysm (rupture) of splenic artery	1	—	—	1	—	—	—	—
463	Thrombophlebitis of right thigh	1	—	—	1	—	—	—	—
465	Pulmonary artery thrombosis	1	—	—	—	1	—	—	—
466	Thrombophlebitis of calf veins	1	—	1	—	—	—	—	—
480	Influenza with pneumonia	4	—	2	—	—	2	—	—
481	Influenza	1	—	—	—	1	—	—	—
491	Bronchopneumonia	5	—	1	3	1	—	—	—
500-502	Bronchitis	4	—	1	1	—	1	1	—
526	Bronchiectasis	1	—	—	—	1	—	—	—
527·1	Empysema, without mention of bronchitis	1	—	—	1	—	—	—	—
572·2	Pulmonary fibrosis (idiopathic)	1	—	1	—	—	—	—	—
541·0	Ulcer of duodenum, without mention of perforation	1	—	—	1	—	—	—	—
560·0	Inguinal hernia, without mention of obstruction	1	—	—	—	—	1	—	—
561	Hernia of abdominal cavity with obstruction	2	—	1	—	—	—	1	—
571	Gastro-enteritis	1	—	1	—	—	—	—	—
572·2	Ulcerative colitis	1	—	—	—	1	—	—	—
585	Cholangitis without mention of calculi	1	—	1	—	—	—	—	—
592	Chronic nephritis	1	—	—	—	1	—	—	—
603	Renal necrosis	1	—	—	—	—	1	—	—
630·1	Inflammation of uterus	1	—	—	1	—	—	—	—
745	Kyphoscoliosis	1	—	1	—	—	—	—	—
754	Congenital malformations of circulatory system	3	1	2	—	—	—	—	—
757·1	Cystic disease of kidney	1	—	—	—	—	1	—	—
E800- E999	Accidents, poisonings, and violence	4	1	—	1	—	2	—	—
<b>Total</b>		<b>82</b>	<b>5</b>	<b>17</b>	<b>22</b>	<b>17</b>	<b>16</b>	<b>5</b>	<b>—</b>
<b>Associated with abortion (included above)</b>		<b>7</b>	<b>—</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>—</b>	<b>—</b>

Table LXVII. Tuberculosis of the respiratory system: Death rates per million living, by sex and age, 1931 to 1959, England and Wales

	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over
<b>Males</b>											
1931-35...	85	42	64	490	963	961	1,140	1,368	1,176	723	275
1936-40...	61	20	44	366	742	785	937	1,210	1,216	718	296
1941-45...	76	24	34	339	581	674	811	1,114	1,203	741	295
1946 ...	68	22	23	239	481	615	687	1,020	1,165	768	340
1947 ...	77	15	29	241	500	632	679	1,034	1,213	812	267
1948 ...	56	10	14	211	445	603	633	961	1,166	881	334
1949 ...	33	6	13	127	368	496	591	869	1,153	927	380
1949* ...	34	7	14	127	366	497	592	869	1,159	937	400
1950* ...	38	9	8	78	229	395	428	751	1,024	891	411
1951* ...	30	7	7	46	171	292	364	636	978	953	464
1952* ...	15	4	10	35	102	201	287	503	829	843	447
1953* ...	14	4	3	18	71	156	214	413	712	814	445
1954* ...	9	2	1	13	55	130	192	370	643	778	406
1955* ...	3	1	1	8	30	93	151	307	535	705	420
1956* ...	7	1	2	7	14	71	113	231	456	640	463
1957* ...	3	—	2	3	12	40	105	193	410	605	436
1958* ...	3	1	2	6	13	38	85	166	401	572	416
1959* ...	4	—	—	2	6	31	73	141	325	528	480
<b>Females</b>											
1931-35...	74	43	143	840	1,138	911	646	475	394	306	170
1936-40...	55	24	98	658	1,016	759	511	377	339	272	160
1941-45...	72	24	76	591	916	692	427	304	269	220	123
1946 ...	60	25	69	468	842	662	382	261	242	207	119
1947 ...	70	24	63	502	899	730	411	267	249	224	133
1948 ...	52	19	53	462	812	702	367	255	235	218	105
1949 ...	33	9	30	349	684	622	348	253	245	229	127
1949* ...	33	10	30	351	682	622	348	254	249	236	139
1950* ...	29	8	15	199	429	444	273	229	212	212	144
1951* ...	25	8	14	108	278	347	238	192	180	198	135
1952* ...	18	5	6	58	169	230	166	131	148	150	159
1953* ...	17	5	3	32	122	174	146	116	130	162	140
1954* ...	11	2	3	31	84	143	145	104	107	137	117
1955* ...	6	2	4	12	56	113	101	84	95	111	115
1956* ...	4	1	—	6	35	80	79	62	70	111	125
1957* ...	4	1	—	6	12	70	75	53	55	80	91
1958* ...	3	1	1	6	14	48	58	51	69	99	101
1959* ...	4	1	1	2	7	33	44	46	53	86	95

\* According to the Seventh (1955) Revision of the International List. Throughout the rest of the table rates are according to the Fifth (1938) Revision.

Table LXVIII. Tuberculosis of the respiratory system: Notification rates\* per 100,000 living, by sex and age, 1938 to 1959, England and Wales

	All ages	0-	5-	15-	25-	35-	45-	65 and over
<b>Males</b>								
1938...	108	20	42	141	137	136	136	52
1939...	98	17	32	132	124	124	125	46
1940...	104	17	29	145	146	128	123	43
1941...	115	20	33	154	155	148	141	50
1942...	117	22	38	165	148	153	142	49
1943...	119	27	40	166	144	154	152	50
1944...	122	30	41	180	158	142	149	56
1945...	118	32	40	178	160	135	142	53
1946...	119	32	46	179	174	125	138	54
1947...	118	40	53	193	163	116	137	56
1948...	117	44	51	215	161	117	139	64
1949...	119	46	49	180	159	122	146	68
1950...	111	53	49	159	154	107	135	67
1951...	115	53	48	170	156	117	141	72
1952...	112	52	51	165	147	116	135	77
1953...	110	49	49	155	133	114	139	85
1954...	100	41	40	143	125	106	126	82
1955...	92	36	34	125	110	96	121	81
1956...	88	29	28	115	101	92	121	87
1957...	82	26	23	99	97	90	114	87
1958...	76	25	21	89	86	81	108	87
1959...	70	21	17	70	79	79	102	89
<b>Females</b>								
1938...	77	18	42	175	129	72	42	19
1939...	71	15	33	166	116	68	37	18
1940...	70	17	30	168	120	66	35	16
1941...	76	19	33	185	126	69	41	19
1942...	78	20	34	204	130	70	37	18
1943...	83	26	40	209	142	73	40	18
1944...	86	26	40	227	150	75	38	16
1945...	81	26	41	223	140	69	34	16
1946...	80	28	49	213	141	65	35	16
1947...	83	33	51	235	146	66	35	17
1948...	86	46	58	244	151	68	35	17
1949...	85	44	53	238	155	71	35	17
1950...	82	43	52	238	152	69	31	16
1951...	81	50	52	229	149	68	33	16
1952...	80	49	53	216	148	71	35	16
1953...	77	45	52	201	141	73	34	18
1954...	68	37	44	187	124	63	30	17
1955...	60	35	38	156	112	59	30	17
1956...	55	30	31	139	101	57	29	18
1957...	49	30	27	116	90	55	29	17
1958...	43	25	24	97	79	47	26	17
1959...	39	22	19	83	69	49	25	16

\* Notifications of tuberculosis used in this and subsequent tables for 1956 onwards are those returned to the General Register Office, and not, as in previous years, those returned to the Ministry of Health. There is a small but insignificant difference between the figures from the two sources. Cases of unstated age are omitted for 1956 onwards.

Table LXIX. Tuberculosis of the respiratory system: Ratio of deaths to 100 notifications\*, by sex and age, 1938 to 1959, England and Wales

	Males						Females					
	All ages	0-	15-	25-	45-	65 and over	All ages	0-	15-	25-	45-	65 and over
1938 ...	60	13	38	60	85	112	55	16	45	60	80	115
1939 ...	67	14	38	64	96	133	59	19	46	65	93	124
1940 ...	65	15	35	61	100	139	64	23	53	68	96	139
1941 ...	59	20	33	55	87	121	59	26	48	65	81	110
1942 ...	52	13	27	48	78	121	50	18	39	55	79	106
1943 ...	53	13	25	48	81	121	46	16	35	51	73	102
1944 ...	48	11	22	44	76	110	42	15	30	47	70	111
1945 ...	48	11	22	44	76	118	44	16	31	51	76	117
1946 ...	47	10	18	42	78	119	43	12	31	51	72	110
1947 ...	47	9	17	45	81	116	44	12	30	54	74	114
1948 ...	46	6	16	43	75	112	39	8	27	49	71	107
1949 ...	42	4	13	38	68	112	35	5	22	43	71	114
1950 ...	38	4	9	31	64	111	28	4	13	33	70	116
1951 ...	33	3	6	24	55	112	22	3	9	27	56	110
1952 ...	27	2	4	19	47	93	16	2	5	18	40	96
1953 ...	23	2	3	15	38	82	14	2	4	15	36	85
1954 ...	23	1	2	14	38	80	14	1	3	15	35	77
1955 ...	21	0	2	12	33	76	12	1	2	13	29	66
1956 ...	19	1	1	10	27	67	10	0	2	10	23	66
1957 ...	18	1	1	8	25	63	10	1	1	10	19	51
1958 ...	18	1	1	7	25	60	11	1	1	9	23	60
1959 ...	17	1	1	7	22	58	9	1	1	7	19	55

\* See footnote to Table LXVIII.

Table LXX. Tuberculosis of the respiratory system: Death rates per million living, by sex and age, and notifications\* per 100 deaths in standard regions, conurbations, and urban and rural aggregates within regional groups, 1959, England and Wales

	Males							Females							Persons	
	All ages	0-	5-	15-	25-	45-	65 and over	All ages	0-	5-	15-	25-	45-	65 and over	All ages	Notifica-tions per 100 deaths
<b>ENGLAND AND WALES</b>	120	4	—	4	52	220	512	36	4	1	5	38	49	90	77	703
Urban and rural aggregates:																
Conurbations ... ..	137	6	—	2	60	250	622	38	3	2	3	41	46	103	85	811
Areas outside conurbations:																
Urban areas with populations of 100,000 and over ... ..	141	—	—	14	58	250	656	48	—	—	5	39	78	125	93	603
Urban areas with populations of 50,000 and under 100,000 ... ..	115	—	—	5	63	226	412	32	—	—	4	30	59	59	72	704
Urban areas with populations under 50,000 ... ..	106	5	—	5	46	189	431	32	8	—	8	37	41	72	68	672
Rural districts ... ..	92	3	—	1	37	174	392	32	6	1	4	37	42	77	62	558
<b>NORTH OF ENGLAND</b>																
Regions:																
Northern ... ..	141	—	—	—	63	317	517	42	15	4	9	64	47	85	91	648
East and West Ridings ... ..	130	—	—	8	52	207	656	45	6	3	7	54	58	105	86	557
North Western ... ..	147	—	—	3	73	284	565	40	4	—	5	56	41	97	90	768
Conurbations:																
Tyneside ... ..	159	—	—	—	87	294	694	36	—	15	—	43	45	94	95	901
West Yorkshire ... ..	132	—	—	—	40	247	560	46	—	8	—	57	56	102	86	624
South East Lancashire ... ..	163	—	—	—	96	316	594	37	11	—	—	45	37	105	97	509
Merseyside ... ..	176	—	—	11	74	364	865	58	—	—	10	80	80	135	114	1,341
Areas outside conurbations:																
Urban areas with populations of 100,000 and over ... ..	164	—	—	10	66	268	839	62	—	—	17	64	72	190	111	509
Urban areas with populations of 50,000 and under 100,000 ... ..	126	—	—	15	77	246	407	37	—	—	—	55	66	39	80	620
Urban areas with populations under 50,000 ... ..	114	—	—	—	40	212	488	28	9	—	5	53	23	51	70	656
Rural districts ... ..	114	—	—	—	57	249	406	39	29	—	17	63	35	77	77	452

\* See footnote to Table LXVIII.



Table LXX—continued

	Males							Females							Persons	
	All ages	0-	5-	15-	25-	45-	65 and over	All ages	0-	5-	15-	25-	45-	65 and over	All ages	Notifica-tions per 100 deaths
<b>MIDLANDS AND EASTERN</b>																
Regions:																
North Midland ... ..	91	—	—	—	35	177	394	24	—	4	4	21	41	55	57	743
Midland ... ..	134	5	—	3	67	264	592	38	—	—	10	37	55	103	85	613
Eastern ... ..	72	—	—	—	29	125	331	31	7	—	—	25	46	86	51	731
Conurbation:																
West Midlands ... ..	151	11	—	—	78	349	523	32	—	—	6	43	31	101	90	700
Areas outside conurbation:																
Urban areas with populations of 100,000 and over ... ..	122	—	—	—	36	224	631	46	—	—	—	25	78	146	83	635
Urban areas with populations of 50,000 and under 100,000 ... ..	84	—	—	—	24	167	427	25	—	—	13	31	41	40	54	922
Urban areas with populations under 50,000 ... ..	95	—	—	6	61	147	414	29	9	—	10	27	43	63	61	660
Rural districts ... ..	70	—	—	—	23	125	339	27	—	4	—	22	48	67	49	601
<b>GREATER LONDON</b> ... ..	118	10	—	2	43	183	625	35	4	—	2	31	45	99	74	861
<b>SOUTH OF ENGLAND</b>																
Regions:																
London and South Eastern (excluding Greater London) ... ..	107	10	—	6	63	198	327	38	—	—	—	22	65	84	70	617
Southern ... ..	97	—	—	9	29	194	436	27	—	—	—	20	52	56	61	733
South Western ... ..	78	—	—	4	41	145	288	40	—	—	5	40	55	97	59	739
Urban areas with populations of 100,000 and over ... ..	118	—	—	20	42	246	424	37	—	—	—	31	83	48	76	740
Urban areas with populations of 50,000 and under 100,000 ... ..	135	—	—	—	99	265	392	35	—	—	—	7	72	78	81	627
Urban areas with populations under 50,000 ... ..	80	9	—	5	31	154	291	38	—	—	5	27	55	96	58	764
Rural districts ... ..	78	—	—	4	37	132	345	32	—	—	—	37	40	82	55	627
<b>WALES (including Monmouthshire)</b> ... ..	185	20	—	18	76	322	767	37	10	—	6	43	49	85	109	563
Wales I (South East) ... ..	181	27	—	25	79	321	739	39	14	—	—	56	52	77	109	548
Wales II (remainder) ... ..	195	—	—	—	66	326	829	31	—	—	21	11	40	100	111	602
Urban areas with populations of 100,000 and over ... ..	197	—	—	51	143	290	842	43	—	—	—	35	83	101	118	568
Urban area with population of 50,000 and under 100,000 ... ..	138	—	—	—	—	256	606	33	—	—	—	—	—	278	84	860
Urban areas with populations under 50,000 ... ..	182	22	—	14	61	330	742	36	24	—	13	53	39	64	107	583
Rural districts ... ..	184	34	—	—	48	341	771	33	—	—	—	40	38	92	109	515

Table LXXI. Tuberculosis of the respiratory system: Notification rates\* per 100,000 living, by sex and age, in standard regions, 1959, England and Wales

	Males							Females							Persons
	All ages	0-	5-	15-	25-	45-	65 and over	All ages	0-	5-	15-	25-	45-	65 and over	All ages
<b>ENGLAND AND WALES</b> ...	70	21	17	70	79	102	89	39	22	19	83	59	25	16	54
Standard regions:															
Northern ... ..	72	24	21	68	85	107	88	46	24	27	101	64	29	16	59
East and West Ridings ... ..	66	15	14	66	76	96	85	31	14	16	72	47	20	10	48
North Western ... ..	88	19	19	80	98	138	114	52	22	18	112	83	36	25	69
North Midland ... ..	53	16	17	65	60	76	50	32	16	17	70	47	21	11	42
Midland ... ..	68	25	23	68	81	96	74	36	29	25	79	52	17	13	52
Eastern ... ..	47	14	15	47	57	62	62	28	9	12	60	44	20	13	37
London and South Eastern ... ..	79	26	15	92	86	110	107	40	27	18	85	59	27	19	58
Southern ... ..	57	22	10	45	71	84	79	33	18	16	68	55	22	11	45
South Western ... ..	55	18	12	52	64	82	63	32	16	17	64	54	20	16	43
Wales ... ..	79	32	25	78	78	113	122	44	40	29	82	66	28	17	61
Wales I (South East) ... ..	76	32	29	82	75	102	116	44	43	28	89	59	27	18	59
Wales II (remainder) ... ..	88	33	14	69	85	143	134	46	31	31	66	84	31	15	66

\* See footnote to Table LXVIII.

Table LXXII. Tuberculosis of the respiratory system: Ratio of deaths to 100 notifications\*, by sex and age, in standard regions, 1959, England and Wales

	Deaths per 100 notifications							
	Males				Females			
	15-	25-	45-	65 and over	15-	25-	45-	65 and over
<b>ENGLAND AND WALES</b>	<b>1</b>	<b>7</b>	<b>22</b>	<b>58</b>	<b>1</b>	<b>7</b>	<b>19</b>	<b>55</b>
<b>Standard regions</b>								
Northern ... ..	—	7	30	59	1	10	16	55
East and West Ridings ...	1	7	22	77	1	11	29	103
North Western ... ..	0	7	21	50	0	7	11	39
North Midland ... ..	—	6	23	79	1	4	20	50
Midland ... ..	0	8	27	80	1	7	31	81
Eastern ... ..	—	5	20	54	—	6	23	64
London and South Eastern...	0	6	17	50	0	5	18	49
Southern ... ..	2	4	23	55	—	4	24	50
South Western ... ..	1	6	18	46	1	7	27	61
Wales (including Monmouthshire) ... ..	2	10	28	63	1	7	17	50
Wales I (South East) ... ..	3	11	32	64	—	9	19	43
Wales II (remainder) ... ..	—	8	23	62	3	1	13	67

\* See footnote to Table LXVIII.

Table LXXIII. Tuberculosis of the respiratory system: Standardised Mortality Ratios and standardised notification ratios\*, by sex, in standard regions, conurbations, and urban and rural aggregates, 1959, England and Wales

	Males		Females	
	S.M.R.	S.N.R.	S.M.R.	S.N.R.
<b>ENGLAND AND WALES</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Regions and conurbations:</b>				
<b>Northern</b> ... ..	<b>123</b>	<b>105</b>	<b>122</b>	<b>116</b>
Tyneside Conurbation ... ..	138	151	105	174
Remainder of Northern ... ..	117	89	128	95
<b>East and West Ridings</b> ... ..	<b>108</b>	<b>94</b>	<b>126</b>	<b>81</b>
West Yorkshire Conurbation ... ..	106	110	123	85
Remainder of East and West Ridings ... ..	110	84	128	78
<b>North Western</b> ... ..	<b>123</b>	<b>127</b>	<b>109</b>	<b>136</b>
South East Lancashire Conurbation ... ..	137	91	101	94
Merseyside Conurbation ... ..	164	284	171	298
Remainder of North Western ... ..	93	83	87	87
<b>North Midland</b> ... ..	<b>77</b>	<b>77</b>	<b>69</b>	<b>82</b>
<b>Midland</b> ... ..	<b>119</b>	<b>99</b>	<b>109</b>	<b>92</b>
West Midlands Conurbation ... ..	136	123	94	107
Remainder of Midland ... ..	103	76	124	78
<b>Eastern</b> ... ..	<b>60</b>	<b>68</b>	<b>86</b>	<b>73</b>
<b>London and South Eastern</b> ... ..	<b>94</b>	<b>112</b>	<b>94</b>	<b>104</b>
Greater London ... ..	98	123	93	110
Remainder of London and South Eastern ... ..	82	80	96	86
<b>Southern</b> ... ..	<b>84</b>	<b>83</b>	<b>73</b>	<b>87</b>
<b>South Western</b> ... ..	<b>63</b>	<b>79</b>	<b>107</b>	<b>86</b>
<b>Wales (including Monmouthshire)</b> ... ..	<b>150</b>	<b>114</b>	<b>103</b>	<b>114</b>
Wales I (South East) ... ..	149	109	111	112
Wales II (remainder) ... ..	151	126	84	121
<b>Urban and rural aggregates:</b>				
Conurbations ... ..	117	131	104	124
<i>Areas outside conurbations:</i>				
Urban areas with populations of 100,000 and over ... ..	120	108	134	99
Urban areas with populations of 50,000 and under 100,000 ... ..	96	94	88	95
Urban areas with populations under 50,000 ... ..	86	84	87	88
Rural districts ... ..	77	60	89	71

\* See footnote to Table LXVIII.

Table LXXIV. Non-respiratory tuberculosis: Death rates per million living, by sex and age, 1938 to 1959, England and Wales

	Males					Females				
	All ages	0-	15-	25-	45 and over	All ages	0-	15-	25-	45 and over
1938-40...	117	221	136	79	67	93	201	121	59	46
1941-45...	131	236	195	98	62	96	213	141	59	45
1946 ...	93	180	120	60	54	75	165	107	50	35
1947 ...	87	179	96	53	52	73	153	109	48	35
1948 ...	72	134	79	45	52	62	130	84	41	34
1949 ...	62	107	69	41	46	47	92	60	34	29
1950 ...	47	75	44	34	40	40	76	54	22	29
1951 ...	44	70	38	33	37	37	69	44	21	30
1952 ...	33	43	27	23	36	24	38	25	16	23
1953 ...	24	29	17	18	30	21	30	18	12	23
1954 ...	21	16	15	18	30	17	13	15	12	22
1955 ...	17	11	12	14	26	13	14	5.3	8.5	18
1956 ...	13	7.3	4.4	11	20	11	5.6	7.6	9.2	16
1957 ...	12	7.2	6.5	11	19	12	8.6	6.5	8.0	17
1958 ...	12	5.4	7.1	9.4	20	9.5	5.8	3.2	6.1	16
1959 ...	8.7	6.0	2.7	6.3	15	8.1	4.5	2.8	5.4	13

Table LXXV. Non-respiratory tuberculosis: Notification rates\* per million living, by sex and age, 1938 to 1959, England and Wales

	Males					Females				
	All ages	0-	15-	25-	45 and over	All ages	0-	15-	25-	45 and over
1938-40...	290	744	341	151	72	264	641	403	172	61
1941-45...	269	698	326	148	64	261	632	413	178	63
1946 ...	217	569	250	123	53	210	518	334	149	47
1947 ...	202	518	227	114	54	196	455	317	144	51
1948 ...	197	505	243	99	53	199	473	333	138	46
1949 ...	171	423	211	93	50	174	399	304	127	40
1950 ...	151	350	186	93	48	164	343	288	139	39
1951 ...	149	327	196	98	48	159	314	300	131	46
1952 ...	135	275	196	91	50	146	272	242	135	54
1953 ...	122	233	163	85	59	133	224	240	129	51
1954 ...	109	192	149	93	48	133	199	245	140	56
1955 ...	96	145	154	85	48	109	144	203	126	48
1956 ...	87	121	131	83	49	98	113	188	118	49
1957 ...	76	91	119	74	49	93	103	162	121	46
1958 ...	70	75	106	82	44	83	77	142	111	50
1959 ...	58	53	86	71	40	67	55	114	88	46

\* See footnote to Table LXVIII.

Table LXXVI. Mass miniature radiography: Number of examinations of person examined, 1959,

(The total numbers of examinations have been

Category of person examined	Males											All ages
	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	
Out-patients and in-patients of hospitals ... ..	80	20	430	540	1,520	1,300	1,950	990	640	1,040	30	8,540
H.M. Forces intakes ... ..	—	80	5,680	33,770	590	40	20	—	—	—	20	40,200
School children (Mantoux test) ... ..	2,530	2,050	790	—	—	—	—	—	—	—	—	5,370
School children (School groups) ... ..	12,410	16,680	25,870	160	—	—	—	—	—	—	10	55,130
Contacts (Mantoux test) ... ..	440	180	360	290	190	470	270	70	40	10	—	2,320
Other contacts ... ..	2,700	830	3,120	1,740	3,140	2,610	1,740	620	300	340	50	17,190
Persons covered by special surveys ... ..	820	690	30,100	23,140	51,350	47,540	44,340	16,770	11,510	19,140	200	245,600
Persons in prisons, borstals, etc. ... ..	110	110	3,470	2,930	3,310	2,110	1,310	560	280	1,060	10	15,260
Persons in factories/offices (General surveys) ... ..	—	70	90,200	106,320	236,120	232,030	199,630	72,110	41,910	12,910	330	990,910
General public volunteers ... ..	4,060	2,640	36,040	37,220	94,150	91,210	82,360	31,480	20,870	30,020	500	430,550
Ante-natal cases ... ..	—	—	—	—	—	—	—	—	—	—	—	—
Psychiatric hospitals ... ..	410	120	1,760	2,500	5,650	7,870	8,380	3,410	2,630	5,120	520	38,370
<b>Total ... ..</b>	<b>23,560</b>	<b>23,470</b>	<b>197,820</b>	<b>208,610</b>	<b>396,020</b>	<b>385,180</b>	<b>340,000</b>	<b>126,010</b>	<b>77,460</b>	<b>69,640</b>	<b>1,670</b>	<b>1,849,440</b>
Persons referred by general practitioners ... ..	3,800	810	7,530	8,950	19,160	18,640	20,220	9,280	7,520	7,930	40	103,880
<b>Total (all groups) ... ..</b>	<b>27,360</b>	<b>24,280</b>	<b>205,350</b>	<b>217,560</b>	<b>415,180</b>	<b>403,820</b>	<b>360,220</b>	<b>135,290</b>	<b>84,980</b>	<b>77,570</b>	<b>1,710</b>	<b>1,953,320</b>

made by mass radiography units, by sex, age, and category England and Wales

derived from a 10 per cent sample of record cards)

Category of person examined	Females											All ages	Category of person examined	
	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated			
Out-patients and in-patients of hospitals ... ..	30	20	500	790	1,490	1,820	2,030	840	700	1,140	20	9,380	17,920	Out-patients and in-patients of hospitals
H.M. Forces intakes ... ..	—	—	10	10	—	—	—	—	—	—	—	20	40,220	H.M. Forces intakes
School children (Mantoux test) ... ..	2,410	2,130	590	—	—	—	—	—	—	—	—	5,130	10,500	School children (Mantoux test)
School children (School groups) ... ..	10,500	15,530	20,160	150	—	—	—	—	—	—	—	46,340	101,470	School children (School groups)
Contacts (Mantoux test) ... ..	370	150	280	180	330	590	300	40	20	30	—	2,290	4,610	Contacts (Mantoux test)
Other contacts ... ..	3,580	1,180	3,120	2,140	2,760	2,700	2,110	740	340	530	20	19,220	36,410	Other contacts
Persons covered by special surveys ... ..	890	950	33,570	29,760	56,300	60,200	55,810	22,780	18,130	29,670	380	308,440	554,040	Persons covered by special surveys
Persons in prisons, borstals, etc. ... ..	20	50	320	130	160	320	230	100	80	640	10	2,060	17,320	Persons in prisons, borstals, etc.
Persons in factories/offices (General surveys) ... ..	—	180	125,420	111,190	93,500	87,670	74,520	21,310	7,190	2,720	290	523,990	1,514,900	Persons in factories/offices (General surveys)
General public volunteers ... ..	4,630	2,890	54,990	56,940	114,240	118,580	99,160	36,240	25,600	28,350	160	541,780	972,330	General public volunteers
Ante-natal cases ... ..	10	—	3,920	13,170	18,070	4,150	90	—	—	—	20	39,430	39,430	Ante-natal cases
Psychiatric hospitals ... ..	410	60	1,230	1,850	4,050	5,160	6,930	3,640	3,250	8,610	420	35,610	73,980	Psychiatric hospitals
<b>Total ... ..</b>	<b>22,850</b>	<b>23,140</b>	<b>244,110</b>	<b>216,310</b>	<b>290,900</b>	<b>281,190</b>	<b>241,180</b>	<b>85,690</b>	<b>55,310</b>	<b>71,690</b>	<b>1,320</b>	<b>1,533,690</b>	<b>3,383,130</b>	<b>Total</b>
Persons referred by general practitioners ... ..	3,010	940	10,410	12,120	20,110	18,140	13,790	5,530	4,130	5,880	—	94,060	197,940	Persons referred by general practitioners
<b>Total (all groups) ... ..</b>	<b>25,860</b>	<b>24,080</b>	<b>254,520</b>	<b>228,430</b>	<b>311,010</b>	<b>299,330</b>	<b>254,970</b>	<b>91,220</b>	<b>59,440</b>	<b>77,570</b>	<b>1,320</b>	<b>1,627,750</b>	<b>3,581,070</b>	<b>Total (all groups)</b>

Table LXXVII. Mass miniature radiography: (a) Numbers of cases of respiratory radiography units, (b) rates per 1,000 examinations, by sex, age, and

Category of person examined	Males											All ages
	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	
Out-patients and in-patients of hospitals	(a) — (b) —	—	—	1 1.9	4 2.6	2 1.5	4 2.1	1 1.0	—	2 1.9	—	14 1.6
H.M. Forces intakes	(a) — (b) —	—	7 1.2	53 1.6	1 1.7	—	—	—	—	—	—	61 1.5
School children (Mantoux test)	(a) 3 (b) 1.2	1 0.5	—	—	—	—	—	—	—	—	—	4 0.7
School children (School groups)	(a) 3 (b) 0.2	6 0.4	8 0.3	—	—	—	—	—	—	—	—	17 0.3
Contacts (Mantoux test)	(a) 2 (b) 4.5	—	—	1 5.3	2 4.3	—	—	—	—	1 100.0	—	6 2.6
Other contacts	(a) 4 (b) 1.5	—	5 1.6	7 4.0	19 6.1	11 4.2	3 1.7	2 3.2	1 3.3	3 8.8	1 20.0	56 3.3
Persons covered by special surveys	(a) 2 (b) 2.4	—	21 0.7	35 1.5	108 2.1	121 2.5	154 3.5	69 4.1	50 4.3	94 4.9	—	654 2.7
Persons in prisons, borstals, etc.	(a) — (b) —	—	—	8 2.7	17 5.1	29 13.7	22 16.8	10 17.9	8 28.6	12 11.3	—	106 6.9
Persons in factories/offices (General surveys)	(a) — (b) —	—	53 0.6	114 1.1	268 1.1	255 1.1	289 1.4	118 1.6	83 2.0	24 1.9	1 3.0	1,205 1.2
General public volunteers	(a) 2 (b) 0.5	1 0.4	33 0.9	56 1.5	159 1.7	152 1.7	163 2.0	91 2.9	55 2.6	78 2.6	—	790 1.8
Ante-natal cases	(a) — (b) —	—	—	—	—	—	—	—	—	—	—	—
Psychiatric hospitals	(a) — (b) —	—	1 0.6	1 0.4	14 2.5	14 1.8	19 2.3	14 4.1	9 3.4	17 3.3	—	89 2.3
Total	(a) 16 (b) 0.7	8 0.3	128 0.6	275 1.3	591 1.5	586 1.5	654 1.9	305 2.4	206 2.7	231 3.3	2 1.2	3,002 1.6
Persons referred by general practitioners	(a) 4 (b) 1.1	4 4.9	49 6.5	89 9.9	218 11.4	172 9.2	224 11.1	133 14.3	88 11.7	110 13.9	—	1,091 90.5
Total (all groups)	(a) 20 (b) 0.7	12 0.5	177 0.9	364 1.7	809 1.9	758 1.9	878 2.4	438 3.2	294 3.5	341 4.4	2 1.2	4,093 2.1

tuberculosis requiring treatment or close clinic supervision observed by mass category of person examined, 1959, England and Wales

Category of person examined	Females											All ages	Persons	Category of person examined	
	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated				
Out-patients and in-patients of hospitals	—	—	1 2.0	2 2.5	2 1.3	1 0.5	2 1.0	—	2 2.9	—	—	10 1.1	24 1.3	(a) } (b) }	Out-patients and in-patients of hospitals
H.M. Forces intakes	—	—	—	1 100.0	—	1 0.0	—	—	—	—	—	2 100.0	63 1.6	(a) } (b) }	H.M. Forces intakes
School children (Mantoux test)	4 1.7	1 0.5	—	—	—	—	—	—	—	—	—	5 1.0	9 0.9	(a) } (b) }	School children (Mantoux test)
School children (School groups)	5 0.5	5 0.3	10 0.5	—	—	—	—	—	—	—	—	20 0.4	37 0.4	(a) } (b) }	School children (School groups)
Contacts (Mantoux test)	1 2.7	—	—	—	1 3.0	1 1.7	1 3.3	—	—	—	—	4 1.7	10 2.2	(a) } (b) }	Contacts (Mantoux test)
Other contacts	4 1.1	—	11 3.5	6 2.8	10 3.6	8 3.0	1 0.5	2 2.7	—	—	—	42 2.2	98 2.7	(a) } (b) }	Other contacts
Persons covered by special surveys	—	1 1.1	45 1.3	69 2.3	123 2.2	123 2.0	82 1.5	17 0.7	15 0.8	26 0.9	—	501 1.6	1,155 2.1	(a) } (b) }	Persons covered by special surveys
Persons in prisons, borstals, etc.	—	—	—	—	1 6.2	—	—	—	—	—	—	1 0.5	107 6.2	(a) } (b) }	Persons in prisons, borstals, etc.
Persons in factories/offices (General surveys)	—	—	105 0.8	129 1.2	102 1.1	84 1.0	48 0.6	4 0.2	4 0.6	3 1.1	—	479 0.9	1,684 1.1	(a) } (b) }	Persons in factories/offices (General surveys)
General public volunteers	—	1 0.3	70 1.3	78 1.4	184 1.6	138 1.2	66 0.7	22 0.6	26 1.0	16 0.6	—	601 1.1	1,391 1.4	(a) } (b) }	General public volunteers
Ante-natal cases	—	—	7 1.8	19 1.4	15 0.8	9 2.2	—	—	—	—	—	50 1.3	50 1.3	(a) } (b) }	Ante-natal cases
Psychiatric hospitals	—	—	3 2.4	—	3 0.7	12 2.3	6 0.9	2 0.5	2 0.6	12 1.4	—	40 1.1	129 1.7	(a) } (b) }	Psychiatric hospitals
Total	14 0.6	8 0.3	252 1.0	304 1.4	441 1.5	377 1.3	206 0.9	47 0.5	49 0.9	57 0.8	—	1,755 1.1	4,757 1.4	(a) } (b) }	Total
Persons referred by general practitioners	11 3.7	4 4.3	54 5.2	99 8.2	124 6.2	106 5.8	72 5.2	16 2.9	14 3.4	21 3.6	—	521 5.5	1,612 8.1	(a) } (b) }	Persons referred by general practitioners
Total (all groups)	25 1.0	12 0.5	306 1.2	403 1.8	565 1.8	483 1.6	278 1.1	63 0.7	63 1.1	78 1.0	—	2,276 1.4	6,369 1.8	(a) } (b) }	Total (all groups)

Table LXXVIII. Mass miniature radiography: (a) Numbers, (b) rates per 1,000 examinations of non-tuberculous conditions diagnosed following examination, by sex and age, 1959, England and Wales

	Males													Females													Persons	
	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	All ages	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	All ages	All ages			
Malignant neoplasms																												
All groups, <i>excluding</i> persons referred by general practitioners	{(a) 1	—	2	4	7	44	226	218	231	258	—	991	—	1	—	2	10	46	26	26	47	—	—	—	159	1,150		
	{(b) 0.0	—	0.0	0.0	0.0	0.1	0.7	1.7	3.0	3.7	—	0.5	—	0.0	—	0.0	0.0	0.2	0.3	0.5	0.7	—	—	—	0.1	0.3		
Persons referred by general practitioners	{(a) 1	—	1	3	18	57	259	240	234	341	—	1,154	1	1	1	4	16	49	38	21	41	—	—	172	1,326			
	{(b) 0.3	—	0.1	0.3	0.9	3.1	12.8	25.9	31.1	43.0	—	11.1	0.3	1.1	0.1	0.2	0.9	3.6	6.9	5.1	7.0	—	—	1.8	6.7			
Total (all groups)	{(a) 2	—	3	7	25	101	485	458	465	599	—	2,145	1	2	1	2	5	26	95	64	47	88	—	331	2,476			
	{(b) 0.1	—	0.0	0.0	0.1	0.3	1.3	3.4	5.5	7.7	—	1.1	0.0	0.1	0.0	0.0	0.1	0.4	0.7	0.8	1.1	—	—	0.2	0.7			
Non-malignant neoplasms																												
All groups, <i>excluding</i> persons referred by general practitioners	{(a) 2	—	6	8	19	30	80	43	35	49	—	272	—	—	—	9	5	13	39	83	50	53	88	—	340	612		
	{(b) 0.1	—	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.7	—	0.1	—	—	—	0.0	0.0	0.0	0.1	0.3	0.6	1.0	1.2	—	0.2	0.2		
Persons referred by general practitioners	{(a) —	1	1	—	2	2	6	2	5	6	—	25	2	—	—	3	1	11	5	6	3	—	—	31	56			
	{(b) —	1.2	0.1	—	0.1	0.1	0.3	0.2	0.7	0.8	—	0.2	0.7	—	—	0.1	0.1	0.8	0.9	1.5	0.5	—	—	0.3	0.3			
Total (all groups)	{(a) 2	1	7	8	21	32	86	45	40	55	—	297	2	—	9	5	16	40	94	55	59	91	—	371	668			
	{(b) 0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.5	0.7	—	0.2	0.1	—	0.0	0.0	0.1	0.1	0.4	0.6	1.0	1.2	—	0.2	0.2			
Lymphadenopathies, <i>excluding</i> sarcoids																												
All groups, <i>excluding</i> persons referred by general practitioners	{(a) —	—	5	3	5	3	2	3	—	5	—	26	1	—	1	3	2	2	2	1	1	1	—	—	14	40		
	{(b) —	—	0.0	0.0	0.0	0.0	0.0	0.0	—	0.1	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—	0.0	0.0		
Persons referred by general practitioners	{(a) 5	—	3	—	3	1	1	—	—	1	—	14	3	—	—	1	2	2	1	1	1	—	—	12	26			
	{(b) 1.3	—	0.4	—	0.2	0.1	0.0	—	—	0.1	—	0.1	1.0	—	—	0.1	0.1	0.1	0.1	0.2	0.2	0.2	—	—	0.1	0.1		
Total (all groups)	{(a) 5	—	8	3	8	4	3	3	—	6	—	40	4	—	1	4	4	3	2	2	2	—	—	26	66			
	{(b) 0.2	—	0.0	0.0	0.0	0.0	0.0	0.0	—	0.1	—	0.0	0.2	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—	0.0	0.0			
Sarcoids, including enlarged hilar glands																												
All groups, <i>excluding</i> persons referred by general practitioners	{(a) —	2	12	40	79	29	14	10	1	6	—	193	—	3	10	45	84	42	30	10	5	2	—	—	231	424		
	{(b) —	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.0	0.1	—	0.1	—	0.1	0.0	0.2	0.3	0.1	0.1	0.1	0.1	0.0	—	—	0.2	0.1		
Persons referred by general practitioners	{(a) 3	—	7	12	28	11	9	3	1	3	—	77	2	—	4	12	26	25	13	2	3	4	—	—	91	168		
	{(b) 0.8	—	0.9	1.3	1.5	0.6	0.4	0.3	0.1	0.4	—	0.7	0.7	—	0.4	1.0	1.3	1.4	0.9	0.4	0.7	0.7	—	—	1.0	0.8		
Total (all groups)	{(a) 3	2	19	52	107	40	23	13	2	9	—	270	2	3	14	57	110	67	43	12	8	6	—	—	322	592		
	{(b) 0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.1	—	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.2	0.1	0.1	0.1	—	—	0.2	0.2		
Congenital cardiac abnormalities and abnormalities of the vascular system																												
All groups, <i>excluding</i> persons referred by general practitioners	{(a) 7	9	44	44	37	40	27	14	7	3	—	232	15	3	45	31	53	41	24	15	4	7	—	—	239	471		
	{(b) 0.3	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	—	0.1	0.7	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.8	—	0.2	0.1		
Persons referred by general practitioners	{(a) 2	1	4	3	3	3	8	5	1	5	—	35	3	—	6	2	6	4	6	5	2	4	—	—	38	73		
	{(b) 0.5	1.2	0.5	0.3	0.2	0.2	0.4	0.5	0.1	0.6	—	0.3	1.0	—	0.6	0.2	0.3	0.2	0.4	0.9	0.5	0.7	—	—	0.4	0.4		
Total (all groups)	{(a) 9	10	48	47	40	43	35	19	8	8	—	267	18	3	51	33	59	45	30	20	6	11	—	—	277	544		
	{(b) 0.3	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	—	0.1	0.7	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.8	—	0.2	0.2		
Acquired cardiac abnormalities and abnormalities of the vascular system																												
All groups, <i>excluding</i> persons referred by general practitioners	{(a) 7	3	49	74	151	229	561	446	394	617	—	2,532	3	6	75	82	216	360	746	587	518	785	—	—	3,379	5,911		
	{(b) 0.3	0.1	0.2	0.4	0.4	0.6	1.6	3.5	5.1	8.9	—	1.4	0.1	0.3	0.3	0.4	0.7	1.3	3.1	6.9	9.4	10.9	—	—	2.2	1.7		
Persons referred by general practitioners	{(a) 2	3	9	7	53	65	159	128	159	301	—	887	6	1	11	24	38	60	122	105	123	286	—	—	777	1,664		
	{(b) 0.5	3.7	1.2	0.8	2.8	3.5	7.9	13.8	21.1	38.0	—	8.5	2.0	1.1	1.1	2.0	1.9	3.3	8.8	19.0	29.8	48.6	—	—	8.3	8.4		
Total (all groups)	{(a) 9	6	58	81	204	294	720	574	553	918	—	3,419	9	7	86	106	254	420	868	692	641	1,071	—	—	4,156	7,575		
	{(b) 0.3	0.2	0.3	0.4	0.5	0.7	2.0	4.2	6.5	11.8	—	1.8	0.3	0.3	0.3	0.5	0.8	1.4	3.4	7.6	10.8	13.8	—	—	2.6	2.1		
Pneumoconiosis without progressive massive fibrosis																												
All groups, <i>excluding</i> persons referred by general practitioners	{(a) —	—	1	2	27	171	547	395	286	256	—	1,685	—	—	—	—	2	14	22	19	13	2	—	—	72	1,757		
	{(b) —	—	0.0	0.0	0.1	0.4	1.6	3.1	3.7	3.7	—	0.9	—	—	—	—	0.0	0.0	0.1	0.2	0.2	0.0	—	—	0.0	0.5		
Persons referred by general practitioners	{(a) —	—	—	—	5	63	171	90	76	75	—	480	—	—	—	—	2	7	14	8	3	4	—	—	38	518		
	{(b) —	—	—	—	0.3	3.4	8.5	9.7	10.1	9.5	—	4.6	—	—	—	—	0.1	0.4	1.0	1.4	0.7	0.7	—	—	0.4	2.6		
Total (all groups)	{(a) —	—	1	2	32	234	718	485	362	331	—	2,165	—	—	—	—	4	21	36	27	16	6	—	—	110	2,275		
	{(b) —	—	0.0	0.0	0.1	0.6	2.0	3.6	4.3	4.3	—	1.1	—	—	—	—	0.0	0.1	0.1	0.3	0.3	0.1	—	—	0.1	0.6		
Pneumoconiosis with progressive massive fibrosis																												
All groups, <i>excluding</i> persons referred by general practitioners	{(a) —	—	—	—	1	10	44	41	32	63	—	191	—	—	—	—	—	—	—	2	4	—	—	—	9	200		
	{(b) —	—	—	—	0.0	0.0	0.1	0.3	0.4	0.9	—	0.1	—	—	—	—	—	—	—	0.0	0.0	—	—	—	0.0	0.1		
Persons referred by general practitioners	{(a) —	—	—	—	3	13	11	9	17	—	—	53	—	—	—	—	—	—	—	1	3	—	—	—	7	60		
	{(b) —	—	—	—	0.2	0.6	1.2	1.2	2.1	—	—	0.5	—	—	—	—	—	—	—	0.1	0.2	—	—	—	0.1	0.3		
Total (all groups)	{(a) —	—	—	—	1	13	57	52	41	80	—	244	—	—	—	—	—	—	—	1	5	—	—	—	16	260		
	{(b) —	—	—	—	0.0	0.0	0.2	0.4	0.5	1.0	—	0.1	—	—	—	—	—	—	—	0.0	0.0	—	—	—	0.0	0.1		

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**Table LXXIX. Deaths from cancer by sex and age according to histological type and death rates per million living, 1959, England and Wales**

		All ages	0-	15-	35-	45-	55-	65 and over
		Number of deaths						
All malignant neoplasms (140-205)	{ M	51,783	416	830	1,703	6,406	14,251	28,177
	{ F	45,334	364	785	2,226	6,065	9,855	26,039
Carcinoma ...	{ M	45,495	20	273	1,178	5,345	12,780	25,899
	{ F	39,908	23	395	1,811	5,283	8,663	23,733
Glioma ...	{ M	872	62	80	118	274	231	107
	{ F	669	58	76	91	153	191	100
Sarcoma ...	{ M	924	80	134	77	155	177	301
	{ F	1,009	84	82	85	166	202	390
Reticuloses ...	{ M	2,791	241	322	275	411	601	941
	{ F	2,389	188	206	179	300	503	1,013
Undefined ...	{ M	1,701	13	21	55	221	462	929
	{ F	1,359	11	26	60	163	296	803
		Death rates per million persons living						
All malignant neoplasms (140-205)		2,140	75	138	625	1,929	4,629	10,098
Carcinoma ...		1,882	4	57	475	1,644	4,117	9,244
Glioma ...		34	12	13	33	66	81	39
Sarcoma ...		43	16	19	26	50	73	129
Reticuloses ...		114	41	45	72	110	212	364
Undefined ...		67	2	4	18	59	146	323

Table LXXX. Cancer (ICD Nos. 140-205): Sex and age specific death rates per million living from cancer at various sites and the percentage of mortality at each site to "all sites", 1959, England and Wales

Males

ICD No.	Site or organ	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	Per cent of all sites
140	Lip ...	35	—	0	1	1	5	14	43	176	486	656	1.5
141	Tongue ...												
142	Salivary gland ...												
143	Floor of mouth ...												
144	Other parts of mouth and mouth unspecified ...												
145	Oral mesopharynx ...	22	1	1	1	4	17	47	108	214	256	0.9	
146	Nasopharynx ...												
147	Hypopharynx ...												
148	Pharynx unspecified ...												
150	Oesophagus ...	63	—	—	—	1	8	37	127	331	643	856	2.6
151	Stomach ...	362	—	—	1	11	65	294	863	1,925	2,986	2,744	15.3
152	Small intestine, including duodenum ...	170	—	0	2	12	33	108	323	836	1,859	2,144	7.2
153	Large intestine, except rectum ...												
154	Rectum ...	140	—	—	1	5	23	83	272	729	1,492	1,789	5.9
155	Biliary passages and liver (stated to be primary site) ...	28	2	1	2	1	6	20	63	138	244	189	1.2
157	Pancreas ...	95	—	—	—	0	17	71	238	500	762	933	4.0
161	Larynx ...	29	—	—	—	1	5	18	78	143	263	300	1.2
162	Bronchus and trachea, and of lung specified as primary	831	—	1	3	24	182	912	2,849	4,171	3,211	1,378	35.1
163	Lung, unspecified as to whether primary or secondary												
170	Breast ...	3	—	—	—	—	0	2	7	13	24	56	0.1
177	Prostate ...	164	1	—	0	—	1	16	154	882	2,696	3,833	6.9
178	Testis ...	9	1	0	6	20	12	9	5	20	14	—	0.4
179	Other and unspecified male genital organs ...	7	—	—	—	0	1	5	12	23	81	144	0.3
180	Kidney ...	32	5	1	1	3	11	39	93	131	192	44	1.4
181	Bladder and other urinary organs ...	92	1	—	—	0	10	52	204	507	883	1,100	3.9



Table LXXX—continued

Males													
ICD No.	Site or organ	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	Per cent of all sites
190	Skin (malignant melanoma) ...	19	1	—	3	5	10	16	23	78	192	500	0.8
191	Skin (malignant neoplasm) ...												
193	Malignant neoplasm of brain and other parts of nervous system ...	48	24	15	12	20	42	99	119	82	19	—	2.0
194	Thyroid gland ...	5	—	—	—	0	1	5	13	23	29	33	0.2
195	Other endocrine glands ...	3	6	1	1	1	2	3	3	7	7	—	0.1
196	Bone (including jaw bone) ...	20	1	6	13	7	8	16	39	74	122	156	0.8
197	Connective tissue ...												
158	Peritoneum ...	9	1	—	2	1	3	10	23	37	48	33	0.4
164	Mediastinum ...												
198	Secondary and unspecified malignant neoplasm of lymph nodes ...												
200	Lymphosarcoma and reticulosarcoma ...	25	3	4	7	11	14	32	54	100	105	67	1.1
201	Hodgkin's disease ...	25	2	3	15	30	25	38	42	51	56	11	1.0
202	Other forms of lymphoma (reticulosis) ...	3	2	0	1	1	2	3	8	12	10	11	0.1
203	Multiple myeloma (plasmocytoma) ...	13	—	—	0	1	7	15	41	66	54	33	0.6
204	Leukaemia and aleukaemia ...	60	49	34	24	21	40	41	105	191	314	200	2.5
205	Mycosis fungoides ...	1	—	—	—	—	0	1	3	3	2	—	0.0
Others in 140-205	Remaining sites ...	55	2	1	1	6	12	45	133	267	448	422	2.3
140-205	Total ...	2,366	100	67	98	185	550	2,020	5,983	11,624	17,457	17,889	100.0
193	Malignant neoplasm of brain and other parts of nervous system ...	62	32	20	17	26	55	119	150	116	41	11	
223	Benign neoplasm of brain and other parts of nervous system ...												
237	Neoplasm of unspecified nature of brain and other parts of nervous system ...												

Table LXXXI. Cancer (ICD Nos. 140-205): Sex and age specific death rates per million living from cancer at various sites and the percentage of mortality at each site to "all sites", 1959, England and Wales

Females													
ICD No.	Site or organ	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	Per cent of all sites
140	Lip ...	13	—	0	1	1	1	10	21	38	102	130	0.7
141	Tongue ...												
142	Salivary gland ...												
143	Floor of mouth ...												
144	Other parts of mouth and mouth unspecified ...												
145	Oral mesopharynx ...	13	—	0	1	3	7	13	28	41	46	73	0.7
146	Nasopharynx ...												
147	Hypopharynx ...												
148	Pharynx unspecified ...												
150	Oesophagus ...	41	—	—	0	1	5	21	64	141	302	409	2.1
151	Stomach ...	262	—	—	1	10	37	126	355	951	2,019	2,668	13.6
152	Small intestine, including duodenum ...	240	—	0	1	8	42	148	354	791	1,764	2,762	12.5
153	Large intestine, except rectum ...												
154	Rectum ...	111	—	—	0	6	23	68	166	368	806	1,145	5.7
155	Biliary passages and liver (stated to be primary site) ...	37	1	—	1	1	6	22	65	140	236	295	1.9
157	Pancreas ...	79	—	—	—	2	10	42	141	289	534	658	4.1
161	Larynx ...	8	—	—	0	0	2	8	16	25	35	57	0.4
162	Bronchus and trachea, and of lung specified as primary ...	123	1	1	2	10	46	147	287	411	467	368	6.4
163	Lung, unspecified as to whether primary or secondary ...												
170	Breast ...	371	—	—	1	35	201	551	742	1,050	1,409	2,192	19.2
171	Cervix uteri ...	109	1	—	1	20	100	162	208	286	371	399	5.6
172	Corpus uteri ...	52	—	1	1	1	8	41	130	190	223	301	2.7
173	Other parts of uterus, including chorionepithelioma ...	10	1	—	1	2	4	12	21	31	34	67	0.5
174	Uterus, unspecified ...												
175	Ovary, Fallopian tube and broad ligament ...	125	—	1	4	17	57	187	322	353	365	311	6.5
176	Other and unspecified female genital organs ...	23	1	0	0	0	5	9	28	81	177	259	1.2

Table LXXXI—continued

		Females												
ICD No.	Site or organ	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	Per cent of all sites	
180	Kidney ... ..	20	9	3	0	1	8	15	30	76	91	109	1.0	
181	Bladder and other urinary organs ... ..	41	1	—	—	1	3	17	60	144	308	513	2.1	
190	Skin (malignant melanoma) ... ..	19	—	0	1	8	14	17	19	45	114	285	1.0	
191	Skin (malignant neoplasm) ... ..													
193	Malignant neoplasm of brain and other parts of nervous system ... ..	35	23	15	11	18	33	55	78	58	19	16	1.8	
194	Thyroid gland ... ..	12	—	—	—	1	2	8	19	41	81	88	0.6	
195	Other endocrine glands ... ..	2	5	1	—	1	2	2	1	3	2	—	0.1	
196	Bone (including jaw bone) ... ..	15	4	6	11	4	5	9	21	35	88	93	0.8	
197	Connective tissue ... ..													
158	Peritoneum ... ..	9	1	1	0	1	3	8	21	27	40	31	0.5	
164	Mediastinum ... ..													
198	Secondary and unspecified malignant neoplasm of lymph nodes ... ..													
200	Lymphosarcoma and reticulosarcoma ... ..	19	3	3	3	3	8	16	37	62	85	52	1.0	
201	Hodgkin's disease ... ..	14	—	1	6	18	15	13	24	28	33	36	0.7	
202	Other forms of lymphoma (reticulosis) ... ..	3	2	1	—	1	2	2	7	11	6	5	0.2	
203	Multiple myeloma (plasmocytoma) ... ..	13	—	—	—	1	3	13	31	50	57	36	0.7	
204	Leukaemia and aleukaemia ... ..	52	39	30	19	20	28	46	77	128	183	145	2.7	
205	Mycosis fungoides ... ..	1	—	—	—	0	—	1	1	2	2	5	0.0	
Others in 140-205	Remaining sites ... ..	62	1	0	1	4	18	51	113	215	338	508	3.2	
140-205	Total ... ..	1,929	90	63	69	199	697	1,841	3,487	6,113	10,336	14,016	100.0	
193	Malignant neoplasm of brain and other parts of nervous system ... ..	50	29	19	19	26	41	83	108	84	35	16		
223	Benign neoplasm of brain and other parts of nervous system ... ..													
237	Neoplasm of unspecified nature of brain and other parts of nervous system ... ..													

Table LXXXII. Cancer: Standardised Mortality Ratios by sex for selected sites, in standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1959, England and Wales

	All sites (140-205)		Buccal cavity and pharynx (140-148)		Oesophagus (150)		Stomach (151)		Intestine and rectum (152-154)		Larynx (161)		Trachea, bronchus and lung (162, 163)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES ...	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Regions:														
Northern ... ..	102	104	116	115	91	103	120	127	113	109	103	159	95	99
East and West Ridings ... ..	102	102	93	109	86	78	116	112	111	110	94	138	100	94
North Western ... ..	104	102	102	119	112	123	113	121	103	105	106	93	106	106
North Midland ... ..	91	96	92	89	89	74	96	95	100	100	101	68	80	74
Midland ... ..	98	101	127	107	86	104	98	105	103	103	99	97	96	88
Eastern ... ..	93	95	97	86	104	88	92	76	89	97	98	84	87	88
London and South Eastern ... ..	108	103	97	91	98	92	88	87	94	98	114	82	122	126
Southern ... ..	92	93	86	60	94	93	78	75	94	90	83	116	94	107
South Western ... ..	91	95	94	94	110	93	89	90	95	92	72	90	80	81
Wales (including Monmouthshire) ... ..	94	101	96	140	135	177	125	137	110	97	91	141	81	62
Conurbations:														
Tyneside ... ..	119	104	143	107	100	122	134	112	132	116	97	230	123	117
West Yorkshire ... ..	105	104	110	121	78	89	126	120	110	112	117	141	103	100
South East Lancashire ... ..	111	104	96	125	98	112	117	120	116	105	114	124	118	111
Merseyside ... ..	114	105	110	118	126	120	114	125	103	112	114	60	122	162
West Midlands ... ..	106	104	128	92	78	94	107	114	105	113	101	75	115	89
Greater London ... ..	112	104	101	86	102	89	91	93	96	100	103	77	130	132
Urban and rural aggregates:														
Conurbations ... ..	111	104	107	100	97	97	105	105	104	105	106	96	122	122
Areas outside conurbations:														
Urban areas with populations of 100,000 and over ... ..	107	102	95	98	107	96	112	107	103	105	120	91	111	101
Urban areas with populations of 50,000 and under 100,000 ... ..	101	102	121	114	107	104	98	91	96	98	122	76	99	102
Urban areas with populations under 50,000 ... ..	94	97	103	97	99	102	99	100	98	98	97	91	86	81
Rural districts ... ..	84	93	80	99	99	105	87	90	96	91	73	134	71	80

Table LXXXII—continued

	Breast (170)		Cervix uteri (171)	Other parts of uterus (172-174)	Prostate (177)	Bladder (181·0, ·8)		Bone (including jaw bone) (196)		Lymphosarcoma, reticulosarcoma (200)		Hodgkin's disease (201)		Leukaemia and aleukaemia (204)	
	M	F	F	F	M	M	F	M	F	M	F	M	F	M	F
<b>ENGLAND AND WALES</b> ...	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Regions:</b>															
Northern ...	23	90	113	89	87	94	120	120	117	111	92	120	78	92	92
East and West Ridings ...	89	93	133	96	93	90	84	141	128	69	86	78	83	109	84
North Western ...	93	92	113	101	98	90	89	102	128	77	64	117	104	88	102
North Midland ...	123	94	97	100	99	98	83	88	71	98	98	92	92	89	104
Midland ...	137	106	98	104	108	92	85	93	113	98	98	87	94	97	108
Eastern ...	58	105	83	105	103	96	107	89	80	99	137	104	89	104	92
London and South Eastern ...	126	110	89	95	105	128	123	100	86	129	127	105	111	109	108
Southern ...	—	96	92	106	101	86	80	67	97	117	117	79	81	115	105
South Western ...	122	101	92	101	112	94	106	74	104	104	94	99	131	95	85
Wales (including Monmouthshire) ...	157	91	99	116	77	75	71	120	75	57	41	96	108	92	101
<b>Conurbations:</b>															
Tyneside ...	—	94	93	85	105	100	119	85	131	50	92	160	67	67	106
West Yorkshire ...	130	92	146	103	95	117	83	149	157	68	86	79	93	91	78
South East Lancashire ...	32	97	109	102	106	90	78	102	115	66	54	133	83	95	116
Merseyside ...	62	76	106	100	100	96	104	78	171	93	113	99	93	95	98
West Midlands ...	109	109	95	95	109	84	105	111	99	131	85	93	57	91	112
Greater London ...	103	111	92	93	97	131	133	84	84	133	121	111	97	108	111
<b>Urban and rural aggregates:</b>															
Conurbations ...	88	103	102	96	100	113	114	97	107	109	101	110	88	99	107
<b>Areas outside conurbations:</b>															
Urban areas with populations of 100,000 and over ...	103	99	114	111	99	103	94	99	121	96	79	99	126	103	113
Urban areas with populations of 50,000 and under 100,000 ...	169	104	104	108	106	110	118	95	123	116	105	104	96	101	106
Urban areas with populations under 50,000 ...	95	97	97	98	106	93	93	108	70	88	103	104	123	95	90
Rural districts ...	98	97	89	99	92	81	78	99	100	94	106	76	80	106	88

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Table LXXXIII. Cancer: Death rates per million living, by sex and certain ages, and Standardised Mortality Ratios (All ages) by sex, for selected sites, 1950 to 1959, England and Wales

All ages	MALES										S.M.R. (1950-52 = 100)	All ages	FEMALES										S.M.R. (1950-52 = 100)	
	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over			0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over		
<b>All sites (140-205)</b>																								
2,058	106	62	100	177	549	2,066	5,275	10,324	15,889	15,265	98	1950	1,840	96	56	60	194	685	1,863	3,706	6,695	10,975	13,172	101
2,120	109	74	92	178	591	2,057	5,414	10,638	16,280	17,627	101	1951	1,822	102	49	66	191	708	1,820	3,616	6,499	10,795	13,886	99
2,152	130	70	102	182	568	2,073	5,562	10,540	16,495	17,031	101	1952	1,848	103	56	66	170	709	1,836	3,680	6,424	10,683	13,169	99
2,166	102	68	104	182	575	2,077	5,616	10,604	16,419	17,279	102	1953	1,833	105	55	59	202	702	1,818	3,574	6,250	10,536	13,197	98
2,223	106	64	105	173	587	2,087	5,720	10,914	16,590	17,730	103	1954	1,861	80	52	72	197	711	1,871	3,556	6,305	10,350	13,509	98
2,252	105	68	99	189	548	2,061	5,803	11,008	17,026	17,308	104	1955	1,873	102	50	63	202	681	1,860	3,550	6,306	10,272	13,551	98
2,274	109	75	101	178	561	2,019	5,885	11,102	16,962	18,038	105	1956	1,891	100	61	71	201	697	1,809	3,559	6,250	10,350	13,682	97
2,312	100	64	109	185	534	2,035	5,950	11,231	17,111	17,849	106	1957	1,890	83	47	57	178	693	1,813	3,559	6,113	10,284	13,277	96
2,333	116	80	90	184	520	2,047	5,869	11,504	17,230	17,761	106	1958	1,929	87	52	72	191	701	1,865	3,521	6,240	10,294	13,862	97
2,366	100	67	98	185	550	2,020	5,983	11,624	17,457	17,889	107	1959	1,929	90	63	69	199	697	1,841	3,487	6,113	10,336	14,016	97
<b>Kidney (180)</b>																								
28	16	1	2	3	11	38	94	104	127	59	98	1950	16	13	3	1	2	4	13	28	60	94	62	88
28	12	4	1	2	12	39	88	113	129	—	98	1951	19	15	4	1	2	6	14	40	71	87	86	102
30	15	3	1	2	13	36	81	134	153	77	104	1952	21	18	3	—	2	6	16	42	72	106	108	110
31	5	3	1	3	11	40	89	133	159	147	106	1953	19	10	3	1	2	6	15	42	70	95	79	103
32	13	1	1	2	6	40	104	144	138	41	108	1954	20	9	4	0	2	6	15	33	75	106	130	104
33	12	3	0	4	10	43	91	141	164	141	112	1955	18	13	4	1	2	5	13	40	61	90	48	95
33	12	4	1	3	12	36	92	137	180	125	110	1956	20	14	4	1	3	5	14	38	72	91	121	103
33	11	2	1	2	8	41	96	141	156	81	109	1957	19	5	3	0	3	3	10	42	67	97	92	95
35	14	2	2	2	11	40	89	161	194	148	117	1958	22	15	3	2	1	6	19	35	68	112	154	109
32	5	1	1	3	11	39	93	131	192	44	107	1959	20	9	3	0	1	8	15	30	76	91	109	98
<b>Brain and other parts of nervous system (193)</b>																								
32	11	13	8	14	34	66	86	48	11	—	91	1950	23	14	11	8	14	24	44	47	28	14	14	102
35	24	10	9	17	37	65	95	47	20	—	99	1951	22	12	7	10	13	25	39	46	26	12	8	96
39	22	13	11	17	42	76	117	46	11	15	111	1952	23	16	12	6	8	24	40	55	31	10	14	102
38	16	13	12	17	39	74	104	57	20	29	107	1953	26	18	14	7	17	25	45	56	30	11	7	114
39	13	11	10	16	40	76	118	56	25	—	109	1954	27	17	13	9	18	24	47	62	36	11	12	120
42	24	16	9	19	35	83	118	65	23	13	117	1955	27	19	11	9	14	26	44	61	40	10	—	117
41	22	17	11	17	39	74	111	75	19	—	114	1956	28	18	10	8	15	29	47	67	42	20	—	125
41	15	10	13	19	39	77	118	68	19	12	114	1957	29	9	10	8	11	27	50	76	44	14	11	126
50	28	21	12	20	41	90	139	82	22	23	136	1958	34	14	14	11	14	29	55	90	56	14	—	149
48	24	15	12	20	42	99	119	82	19	—	131	1959	35	23	15	11	18	33	55	78	58	19	16	153

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Table LXXXIII—continued

All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	S.M.R. (1950-52 =100)	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	S.M.R. (1950-52 =100)	
MALES												FEMALES												
Bone (including jaw bone) (196)																								
21	4	4	17	5	9	16	50	91	114	132	105	1950	14	2	6	8	3	4	9	33	44	68	69	102
21	2	5	13	5	9	17	43	94	133	180	104	1951	14	1	3	7	6	6	11	24	39	74	71	98
19	4	5	13	7	5	17	32	80	117	108	91	1952	14	3	4	10	5	6	13	23	46	59	47	100
19	—	5	13	5	8	14	45	70	109	132	90	1953	13	2	5	7	4	4	8	23	39	77	33	91
17	1	4	11	4	6	13	29	75	112	122	81	1954	14	2	5	7	2	4	8	25	52	55	87	95
16	1	6	9	4	6	9	32	67	122	115	78	1955	12	2	4	4	4	8	20	36	51	90	79	
18	1	7	14	6	9	15	32	66	98	100	86	1956	13	3	5	9	4	6	8	19	38	68	58	89
16	1	3	12	5	6	12	34	54	114	163	77	1957	12	2	4	6	2	3	9	17	39	68	87	83
16	3	5	11	6	4	13	32	62	102	136	77	1958	13	3	6	10	5	5	7	15	36	57	101	86
15	—	4	12	4	5	12	28	61	92	111	71	1959	11	1	6	9	3	3	7	14	26	62	83	75
Leukaemia and aleukaemia (204)																								
47	44	24	25	18	25	56	96	141	124	132	97	1950	37	40	24	16	18	21	33	65	96	84	48	93
47	46	31	22	24	29	41	81	152	138	68	96	1951	41	47	21	15	18	28	42	70	104	101	38	104
52	60	32	24	21	29	44	96	166	189	108	107	1952	41	42	23	17	13	25	38	69	101	140	61	103
53	54	30	24	16	36	47	108	148	207	118	108	1953	44	48	23	13	15	32	39	69	130	113	59	109
54	52	28	24	21	36	48	97	180	184	162	110	1954	44	36	21	20	15	27	38	74	125	132	112	110
57	38	26	25	21	34	55	106	206	244	90	117	1955	43	51	23	16	18	26	42	62	110	131	120	107
57	47	29	29	23	33	49	95	179	285	250	116	1956	47	41	29	19	22	21	36	77	125	151	92	115
60	46	28	27	24	31	47	110	194	318	267	122	1957	47	41	21	12	18	31	43	70	117	172	120	115
60	46	35	22	24	33	48	114	193	262	205	121	1958	46	37	20	11	16	25	41	66	124	191	160	113
60	49	34	24	21	40	41	105	191	314	200	121	1959	52	39	30	19	20	28	46	77	128	183	145	125

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Table LXXXIII—continued

All ages	25-	35-	45-	55-	65-	75-	85 and over	S.M.R. (1950-52 =100)	All ages	25-	35-	45-	55-	65-	75-	85 and over	S.M.R. (1950-52 =100)	
MALES									FEMALES									
Lip, tongue, rest of mouth (140-144)																		
51	1	3	16	84	283	705	985	106	1950	14	1	3	8	25	51	105	186	99
49	1	4	15	75	275	720	881	103	1951	15	2	3	8	23	57	107	235	104
44	1	3	18	75	234	622	631	91	1952	14	1	3	9	23	56	100	128	97
42	2	4	13	67	217	620	691	87	1953	12	1	3	7	22	43	100	138	86
44	2	3	18	65	222	613	878	90	1954	13	1	4	9	17	48	100	161	91
42	1	4	11	68	210	605	718	85	1955	14	0	3	12	21	35	123	174	94
37	1	1	12	50	190	541	788	75	1956	15	1	4	10	25	50	94	185	97
35	1	3	9	54	178	468	698	69	1957	14	1	3	7	21	42	105	185	91
37	2	2	16	52	168	517	784	73	1958	14	1	1	8	19	45	111	191	91
35	1	5	14	43	176	486	656	69	1959	13	1	1	10	21	38	102	130	85
Pharynx (145-148)																		
24	1	2	18	53	133	251	279	97	1950	14	1	8	17	38	37	62	48	100
25	1	6	15	52	133	284	288	101	1951	13	1	6	20	30	41	54	83	95
26	0	5	16	50	142	270	338	102	1952	14	2	8	17	35	48	62	47	104
24	1	6	17	42	140	232	338	95	1953	12	1	6	18	28	39	51	66	89
27	1	6	15	59	141	277	338	106	1954	15	2	8	21	30	49	55	62	104
25	2	5	11	59	124	254	308	97	1955	14	3	6	20	30	43	57	84	100
20	1	5	10	47	109	192	262	79	1956	14	2	6	16	31	46	47	87	95
24	1	4	15	41	135	211	337	90	1957	15	1	6	15	33	54	61	71	103
22	1	5	13	49	96	240	205	83	1958	14	3	7	20	33	36	51	53	96
22	1	4	17	47	108	214	256	85	1959	13	3	7	13	28	41	46	73	87
Oesophagus (150)																		
71	0	9	46	131	444	773	721	101	1950	37	2	8	19	61	166	286	359	101
71	3	8	41	157	400	768	814	100	1951	37	2	6	20	71	164	279	318	101
70	0	7	39	148	370	843	862	98	1952	37	1	10	22	63	160	262	338	99
63	2	9	32	127	352	729	735	88	1953	38	2	4	26	65	143	283	414	99
61	1	8	37	123	330	683	811	85	1954	40	1	6	25	68	149	314	404	104
63	2	9	36	126	337	737	679	88	1955	41	1	10	24	57	161	334	365	106
64	1	10	37	141	329	696	775	88	1956	41	2	6	26	67	152	307	387	104
61	1	8	39	119	322	646	709	82	1957	41	0	5	27	61	152	315	375	103
60	2	6	34	123	345	599	557	81	1958	42	1	5	20	62	159	321	441	104
63	1	8	37	127	331	643	856	85	1959	41	1	5	21	64	141	302	409	99

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Table LXXXIII—continued

All ages	25-	35-	45-	55-	65-	75-	85 and over	S.M.R. (1950-52 =100)		All ages	25-	35-	45-	55-	65-	75-	85 and over	S.M.R. (1950-52 =100)
<b>MALES</b>																		
<b>Stomach (151)</b>																		
379	16	98	367	952	2,086	2,963	2,324	99	1950	284	16	51	160	459	1,250	2,315	2,579	102
387	14	90	354	1,015	2,110	3,064	2,746	101	1951	286	12	54	160	448	1,220	2,392	2,667	101
382	14	80	378	978	2,009	3,079	2,523	99	1952	278	10	52	165	443	1,158	2,181	2,486	97
379	17	89	343	978	2,044	2,927	2,868	98	1953	271	14	51	157	412	1,069	2,211	2,566	93
369	12	88	318	919	1,981	2,979	2,581	95	1954	273	13	43	161	433	1,074	2,115	2,366	92
373	12	71	331	905	1,954	3,169	2,859	95	1955	268	11	42	146	395	1,058	2,080	2,605	90
360	10	76	293	909	1,907	2,938	2,712	91	1956	268	11	45	139	394	1,008	2,126	2,503	89
369	16	64	311	901	1,893	3,095	2,930	93	1957	258	11	42	119	392	977	1,967	2,380	84
365	10	69	303	885	1,926	2,954	2,830	92	1958	264	12	41	128	362	1,001	2,032	2,495	85
362	11	65	294	863	1,925	2,986	2,744	91	1959	262	10	37	126	355	951	2,019	2,668	83
<b>Large intestine, except rectum (153)</b>																		
204	13	41	123	385	1,140	2,354	2,279	102	1950	257	11	55	160	414	977	2,254	3,014	105
202	13	44	124	363	1,127	2,326	2,508	101	1951	239	13	51	150	369	907	2,029	2,914	97
197	13	44	117	353	1,065	2,281	2,692	97	1952	248	11	44	149	396	898	2,073	3,142	98
196	13	38	127	352	1,025	2,267	2,956	97	1953	243	11	48	143	381	888	1,919	3,250	95
190	7	43	111	354	975	2,187	2,784	93	1954	238	12	56	149	373	832	1,875	2,776	92
183	12	38	112	346	932	2,066	2,487	89	1955	240	13	47	143	359	849	1,869	2,904	91
177	11	32	107	333	918	1,969	2,413	86	1956	236	11	46	139	366	797	1,829	2,763	89
176	12	38	106	316	869	1,998	2,477	84	1957	233	7	40	134	351	786	1,773	2,777	86
170	8	37	103	306	862	1,871	2,477	81	1958	232	10	40	137	335	767	1,745	2,899	85
165	11	32	103	309	814	1,829	2,122	79	1959	236	7	41	142	344	777	1,745	2,751	85
<b>Rectum (154)</b>																		
175	7	29	108	388	1,017	1,753	1,868	104	1950	112	7	21	79	203	449	861	1,076	106
172	6	35	101	354	981	1,834	2,085	102	1951	106	6	27	74	193	434	770	917	99
162	6	26	97	326	889	1,796	2,031	95	1952	105	4	27	74	193	390	781	912	96
153	5	24	88	306	852	1,708	1,838	90	1953	106	9	26	84	197	378	758	875	96
157	6	27	95	288	854	1,737	2,108	91	1954	108	7	28	74	184	381	776	1,099	96
149	7	22	95	311	760	1,664	1,615	86	1955	104	7	20	69	183	378	708	1,078	91
147	4	21	77	281	794	1,679	1,938	84	1956	103	5	27	74	163	382	670	1,081	90
144	7	20	83	274	773	1,575	1,663	82	1957	98	4	22	65	152	357	666	1,043	84
144	4	23	91	291	735	1,565	1,568	82	1958	107	4	21	69	171	367	731	1,197	91
140	5	23	83	272	729	1,492	1,789	79	1959	111	6	23	68	166	368	806	1,145	93
<b>Pancreas (157)</b>																		
74	4	13	68	189	378	686	544	96	1950	63	1	9	32	138	286	437	503	101
77	3	20	63	211	389	656	678	100	1951	60	1	6	42	110	272	415	576	94
82	3	17	67	215	441	674	646	105	1952	68	1	9	40	126	285	506	642	105
81	3	20	73	197	438	649	794	104	1953	65	2	11	41	116	266	486	474	99
83	3	20	71	204	448	667	784	105	1954	67	1	10	40	111	275	462	689	100
86	2	19	69	216	441	718	795	108	1955	71	2	9	45	121	294	465	623	105
86	2	16	74	223	442	712	538	107	1956	67	2	10	32	126	276	442	549	98
87	3	15	76	218	471	656	709	108	1957	74	1	15	43	129	275	510	603	107
91	3	16	75	214	472	762	886	113	1958	75	2	9	40	122	305	476	718	107
95	0	17	71	238	500	762	933	117	1959	79	2	10	42	141	289	534	658	111
<b>Trachea, bronchus and lung (162, 163)</b>																		
484	29	165	821	1,836	2,025	1,288	515	92	1950	88	8	42	107	213	341	351	241	96
530	22	175	850	1,952	2,359	1,448	729	101	1951	91	11	39	100	221	352	396	288	99
568	25	179	843	2,142	2,514	1,623	1,046	107	1952	98	7	40	107	253	344	438	324	105
607	27	173	881	2,245	2,768	1,913	868	114	1953	98	11	40	107	235	361	435	263	104
657	25	181	934	2,410	3,040	2,018	838	122	1954	102	11	41	122	235	379	388	373	107
693	24	175	895	2,539	3,310	2,280	1,000	128	1955	106	10	39	120	261	390	416	275	111
726	25	172	918	2,625	3,473	2,473	1,288	133	1956	111	10	40	122	267	393	445	428	115
759	20	169	915	2,724	3,658	2,655	1,384	138	1957	116	9	40	133	280	390	476	364	118
784	23	166	916	2,684	3,923	2,969	1,182	142	1958	119	11	48	135	278	401	468	404	121
831	24	182	912	2,849	4,171	3,211	1,378	149	1959	123	10	46	147	287	411	467	368	124
<b>Breast (170)</b>																		
3	0	1	4	5	14	26	74	105	1950	350	31	215	522	770	1,052	1,567	2,283	100
3	0	1	3	8	13	24	34	102	1951	352	31	222	504	779	1,062	1,543	2,402	99
3	—	1	3	6	14	20	62	94	1952	363	30	217	513	791	1,114	1,579	2,088	101
4	—	3	4	14	15	16	44	128	1953	356	36	218	494	766	1,073	1,510	2,289	99
4	—	2	4	8	19	30	27	125	1954	364	34	228	528	747	1,060	1,537	2,354	100
4	0	1	2	12	14	28	64	119	1955	369	39	207	546	756	1,062	1,535	2,317	100
3	—	1	4	8	16	17	50	105	1956	371	35	212	531	750	1,067	1,549	2,341	100
3	—	0	2	10	17	24	47	105	1957	370	32	196	538	767	1,029	1,535	2,228	99
3	—	0	3	6	14	37	34	109	1958	383	39	214	556	757	1,089	1,525	2,351	101
3	—	0	2	7	13	24	56	92	1959	371	35	201	551	742	1,050	1,409	2,192	97
<b>FEMALES</b>																		
<b>Cervix uteri (171)</b>																		
117	19	71	188	314	335	381	359	104	1950	51	2	13	57	136	193	250	200	99
114	18	73	178	297	314	392	394	100	1951	52	1	13	53	128	205	277	171	99
111	16	79	173	289	306	359	277	97	1952	54	1	12	56	132	205	277	257	102
109	23	77	160	267	308	358	329	94	1953	53	2	8	54	145	177	273	230	98
105	20	72	172	239	302	321	304	90	1954	52	1	12	44	136	184	262	267	95
108	24	79	156	254	314	325	275	92	1955	50	2	8	47	129	175	237	281	91
108	27	78	165	235	316	328	312	91	1956	51	1	8	51	135	185	218	249	92
106	24	93	150	223	302	331	332	89	1957	52	2	7	45	133	179	277	201	93
116	24	99	178	246	304	348	378	96	1958	51	1	8	45	131	178	248	191	90
109	20	100	162	208	286	371	399	90	1959	52	1	8	41	130	190	223	301	91
<b>FEMALES</b>																		
<b>Corpus uteri (172)</b>																		
117	19	71	188	314	335	381	359	104	1950	51	2	13	57	136	193	250	200	99
114	18	73	178	297	314	392	394	100	1951	52	1	13	53	128	205	277	171	99
111	16	79	173	289	306	359	277	97	1952	54	1	12	56	132	205	277	257	102
109	23	77	160	267	308	358	329	94	1953	53	2	8	54	145	177	273	230	98
105	20	72	172	239	302	321	30											

Table LXXXIII—continued

All ages	25-	35-	45-	55-	65-	75-	85 and over	S.M.R. (1950-52 =100)		All ages	25-	35-	45-	55-	65-	75-	85 and over	S.M.R. (1950-52 =100)
MALES									FEMALES									
Prostate (177)									Ovary, Fallopian tube, and broad ligament (175)									
146	—	1	21	192	912	2,244	2,426	102	1950	110	16	58	208	285	327	291	221	101
143	1	2	20	168	889	2,227	3,102	100	1951	112	13	60	201	289	328	318	265	101
142	—	2	18	161	879	2,207	2,754	98	1952	110	13	59	209	285	298	280	277	98
149	0	1	23	172	890	2,364	2,706	103	1953	112	11	64	207	280	321	301	197	100
157	0	2	21	160	904	2,520	3,297	107	1954	114	14	63	202	283	318	313	292	101
156	—	2	16	152	917	2,484	3,244	105	1955	121	13	70	207	305	335	322	359	106
165	0	0	16	163	937	2,684	3,588	111	1956	121	13	74	191	323	317	348	306	106
161	0	2	14	150	929	2,558	3,302	107	1957	124	12	73	210	315	325	330	277	107
166	—	2	18	156	922	2,707	3,511	111	1958	124	11	52	199	321	359	332	255	106
164	—	1	16	154	882	2,696	3,833	109	1959	125	17	57	187	322	353	365	311	107
Bladder (181·0, ·8)																		
79	1	9	58	203	438	731	809	94	1950	33	1	4	17	52	154	261	359	105
84	2	11	63	210	471	766	1,033	100	1951	32	1	2	20	52	131	278	221	98
89	1	11	65	201	500	868	1,046	105	1952	32	1	5	18	50	118	273	358	97
86	0	6	59	196	465	881	1,103	101	1953	34	1	4	21	53	123	295	342	103
87	1	11	54	212	464	839	1,027	101	1954	36	2	4	15	52	147	296	391	106
91	2	8	60	197	500	929	1,013	105	1955	36	1	4	19	51	145	298	341	106
93	1	13	60	201	494	941	1,250	108	1956	36	—	4	14	42	143	294	514	104
94	1	11	51	202	493	985	1,209	107	1957	36	—	4	13	50	142	285	446	104
92	1	8	46	200	511	929	1,091	105	1958	36	—	4	16	50	140	283	372	103
91	0	10	51	203	501	871	1,089	103	1959	40	1	3	16	57	139	307	508	111
Other urinary organs (181·7)																		
0	—	—	1	0	1	2	—	60	1950	1	—	—	1	3	4	7	—	123
1	—	1	0	2	2	6	—	141	1951	1	—	—	0	2	3	8	—	92
0	—	—	1	1	1	4	—	99	1952	1	—	1	1	2	3	5	—	86
0	0	—	1	1	2	4	—	98	1953	1	—	—	2	0	6	7	—	113
1	—	—	1	2	4	9	—	175	1954	1	0	0	0	3	5	3	12	111
1	—	—	0	2	3	3	—	115	1955	1	—	—	—	2	3	6	—	77
1	—	—	1	2	4	2	—	123	1956	1	—	1	—	2	5	10	12	130
1	—	—	2	1	3	12	—	186	1957	1	—	—	1	3	4	7	5	118
1	—	0	0	3	1	3	—	111	1958	1	—	—	1	1	3	1	5	61
1	—	—	0	1	6	12	11	174	1959	1	—	—	0	2	5	2	5	94
Hodgkin's disease (201)																		
20	22	21	28	35	41	31	15	91	1950	11	13	10	8	22	26	27	14	94
22	21	24	35	38	51	31	34	104	1951	12	15	14	12	20	24	24	30	103
23	26	23	32	45	49	36	46	106	1952	12	16	10	10	20	28	29	7	103
23	23	27	30	41	55	32	—	106	1953	13	13	12	16	22	24	24	13	106
23	24	29	30	39	51	39	27	107	1954	13	12	11	11	22	32	30	12	105
23	28	26	29	40	49	44	13	106	1955	12	12	12	14	18	30	20	42	104
24	26	28	23	49	56	47	12	108	1956	13	16	13	13	22	27	36	12	112
27	28	32	37	48	50	54	47	124	1957	12	13	11	14	23	26	30	—	104
22	25	21	29	38	45	56	34	100	1958	13	14	12	14	22	32	24	11	113
25	30	25	38	42	51	56	11	114	1959	14	18	15	13	24	28	33	36	118

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Table LXXXVI. Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, at age 45-64, in the standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1959, England and Wales

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	All causes		Vascular lesions affecting central nervous system (330-334)		Chronic rheumatic heart disease and chronic endocarditis (410-416, 421)		Arteriosclerotic heart disease (420)		Myocardial degeneration (422)		Other diseases of heart (430-434)		Hypertension with or without heart disease (440-447)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>ENGLAND AND WALES</b>	13,498	7,337	1,079	966	301	369	3,461	875	186	140	193	135	382	230
<b>Regions:</b>														
Northern	14,429	7,855	1,325	1,164	262	343	4,052	1,260	218	154	184	169	330	211
East and West Ridings	14,279	7,795	1,128	1,000	363	419	3,836	1,054	191	158	224	181	306	239
North Western	15,427	8,164	1,346	1,159	338	489	4,030	1,050	237	180	279	179	415	230
North Midland	12,422	6,930	1,069	954	294	331	3,101	776	200	166	204	129	415	251
Midland	13,986	7,506	1,188	1,003	336	331	3,101	780	220	127	256	161	404	268
Eastern	11,040	6,413	903	830	193	308	2,722	749	139	114	156	100	283	205
London and South Eastern	13,171	6,946	879	793	289	348	3,327	726	119	80	125	87	395	213
Southern	12,092	6,687	835	897	257	256	3,159	710	165	161	178	144	333	164
South Western	12,223	7,175	1,093	982	289	302	3,135	829	260	188	167	120	417	258
Wales (including Monmouthshire)	14,451	7,883	1,155	1,126	358	497	4,048	1,017	203	191	194	149	469	280
<b>Conurbations</b>	14,547	7,512	1,065	920	330	407	3,676	883	167	103	190	136	403	223
Tyneside	15,392	8,089	1,510	1,179	245	375	4,020	1,286	147	143	206	152	314	187
West Yorkshire	15,384	8,262	1,224	1,036	447	413	4,342	1,226	265	107	260	218	320	278
South East Lancashire	16,132	8,329	1,372	1,171	332	491	3,921	986	299	220	286	183	467	211
Merseyside	15,942	8,086	1,273	1,080	409	634	4,331	1,177	104	74	234	194	331	194
West Midlands	15,217	7,620	1,147	966	375	349	3,199	757	246	116	298	175	485	281
Greater London	13,432	6,937	845	759	288	364	3,456	727	98	63	111	85	399	208
<b>Areas outside conurbations:</b>														
Urban areas with populations of 100,000 and over	14,400	7,510	1,201	996	329	402	3,651	870	166	164	229	134	403	248
Urban areas with populations of 50,000 and under 100,000	13,586	7,600	1,110	1,011	271	369	3,538	945	207	153	176	150	343	242
Urban areas with populations under 50,000	12,952	7,276	1,094	1,041	291	346	3,434	914	193	166	193	139	397	224
Rural districts	11,489	6,816	995	929	253	297	2,926	786	218	163	179	125	324	232

Table LXXXVII. Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, at age 65 and over, in the standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1959, England and Wales

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	All causes		Vascular lesions affecting central nervous system (330-334)		Chronic rheumatic heart disease and chronic endocarditis (410-416, 421)		Arteriosclerotic heart disease (420)		Myocardial degeneration (422)		Other diseases of heart (430-434)		Hypertension with or without heart disease (440-447)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>ENGLAND AND WALES</b>	81,122	59,071	11,721	11,490	843	967	15,124	8,258	8,616	8,837	2,114	1,870	2,673	2,659
<b>Regions:</b>														
Northern	81,310	61,412	13,945	13,523	517	658	16,103	9,563	8,993	9,201	1,979	1,814	2,517	2,437
East and West Ridings	84,349	62,365	13,247	12,554	833	1,004	16,398	9,558	8,575	8,498	2,194	2,021	2,543	2,835
North Western	88,187	64,058	14,233	12,888	975	1,045	15,922	8,487	9,155	9,470	2,322	2,172	2,375	2,601
North Midland	78,958	58,426	12,436	11,781	703	793	13,503	7,764	9,394	9,198	2,600	2,295	2,861	2,616
Midland	81,466	59,590	11,791	11,538	728	886	13,618	7,648	9,236	9,610	2,126	1,879	2,822	2,697
Eastern	73,421	55,362	10,084	10,888	680	802	13,854	7,791	8,112	7,832	2,242	1,813	2,292	2,347
London and South Eastern	80,852	57,052	9,500	9,806	978	1,165	15,460	8,107	7,224	7,942	1,968	1,710	2,844	2,826
Southern	74,865	54,000	10,729	10,481	992	832	14,962	8,126	7,669	8,220	2,188	1,617	2,346	2,136
South Western	79,371	58,014	11,441	11,917	829	859	14,965	7,574	11,024	10,563	1,965	1,686	2,724	2,592
Wales (including Monmouthshire)	83,450	61,486	12,744	13,175	853	1,011	15,566	8,441	9,054	9,571	1,574	1,791	3,364	3,164
<b>Conurbations</b>	85,085	60,067	11,194	10,755	935	1,132	15,727	8,535	7,625	8,003	2,091	1,884	2,812	2,922
Tyneside	85,333	59,774	14,417	12,547	556	736	14,972	8,509	7,806	7,906	1,944	1,830	3,139	2,755
West Yorkshire	90,667	64,969	14,320	12,844	933	1,180	19,013	10,602	8,853	8,281	2,347	2,070	2,253	2,617
South East Lancashire	90,099	65,302	14,248	13,099	970	1,122	14,693	7,576	10,287	10,610	2,257	2,262	2,297	2,430
Merseyside	88,308	60,315	13,212	11,079	846	876	17,038	9,404	6,519	5,753	2,673	2,539	2,173	2,955
West Midlands	84,182	62,151	11,807	12,058	705	942	13,193	8,072	9,136	9,748	2,068	1,935	3,136	3,173
Greater London	82,113	57,051	8,817	9,142	1,038	1,240	15,843	8,350	6,337	7,140	1,919	1,635	3,064	3,079
<b>Areas outside conurbations:</b>														
Urban areas with populations of 100,000 and over	84,172	60,897	12,562	12,103	859	1,058	16,141	9,017	8,273	8,926	2,039	1,851	2,938	2,971
Urban areas with populations of 50,000 and under 100,000	84,356	59,993	12,356	12,470	806	822	16,350	8,526	9,275	9,419	2,231	1,878	2,525	2,526
Urban areas with populations under 50,000	80,381	58,687	12,319	12,112	764	788	14,917	8,047	9,466	9,483	2,147	1,768	2,687	2,449
Rural districts	73,185	56,096	11,177	11,281	795	881	13,461	7,388	9,142	9,296	2,116	1,978	2,356	2,280



**Table LXXXVIII. Congenital malformations of the circulatory system (ICD No. 754): Deaths and death rates per million living, by sex and age, 1951 to 1959, England and Wales**

Age	1951		1952		1953		1954		1955		1956		1957		1958		1959	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Deaths</b>																		
All ages ... ..	1,050	963	890	804	913	786	948	767	1,007	756	1,017	791	1,126	911	1,124	870	1,102	921
0- ... ..	582	444	604	491	623	491	647	514	645	430	677	506	725	553	726	528	724	584
1- ... ..	78	60	56	68	60	64	48	58	80	76	58	59	71	60	87	71	76	66
5- ... ..	58	35	42	51	51	37	50	42	53	55	60	49	68	55	52	53	79	67
15- ... ..	177	167	132	111	117	106	122	87	144	115	132	102	140	115	148	117	132	105
45- ... ..	126	180	40	56	46	58	60	45	67	58	65	53	94	95	86	79	69	68
65 and over ...	29	77	16	27	16	30	21	21	18	22	25	22	28	33	25	22	22	31
<b>Death rates per million living*</b>																		
All ages ... ..	49.9	42.3	42.2	35.2	43.1	34.3	44.5	33.4	47.1	32.8	47.3	34.2	52.0	39.2	51.7	37.2	50.4	39.2
0- ... ..	1.67	1.35	1.75	1.50	1.77	1.48	1.87	1.57	1.88	1.33	1.88	1.49	1.95	1.58	1.91	1.47	1.88	1.61
1- ... ..	49.8	40.2	38.4	48.9	43.1	48.2	35.3	44.8	59.4	59.2	43.3	46.3	52.6	46.8	63.7	54.7	54.6	49.9
5- ... ..	18.9	11.9	13.1	16.5	15.4	11.6	14.8	13.0	15.4	16.7	17.1	14.6	19.2	16.2	14.6	15.6	22.3	19.8
15- ... ..	19.3	17.7	14.5	11.8	12.9	11.4	13.6	9.42	16.0	12.5	14.8	11.2	15.7	12.7	16.6	13.0	14.8	11.6
45- ... ..	25.7	31.7	8.00	9.76	9.05	10.0	11.6	7.69	12.8	9.81	12.2	8.88	17.4	15.8	15.7	13.0	12.4	11.1
65 and over ...	14.7	26.9	8.01	9.23	7.98	10.1	10.4	6.93	8.85	7.15	12.2	7.03	13.5	10.3	12.1	6.79	10.6	9.43

\* At ages under 1 year, per thousand live birth occurrences.

**Table LXXXIX. Bronchitis (ICD Nos. 500-502): Infant mortality rates per 1,000 live births, death rates per million living at ages over one year, and Standardised Mortality Ratios (1950-52=100), 1949 to 1959, England and Wales**

	Males										S.M.R. (All ages)
	Infant mortality rate	1-	5-	15-	25-	35-	45-	55-	65-	75 and over	
1949	0.74	29	4.4	10	16	78	492	1,962	4,270	9,534	92
1950	0.79	41	8.0	4.6	13	72	474	1,921	4,296	9,375	91
1951	0.74	46	5.5	5.1	14	93	616	2,479	5,619	12,392	118
1952	0.64	49	8.4	2.6	14	67	476	1,939	4,392	9,163	91
1953	0.70	42	5.7	5.5	11	73	486	2,036	5,007	10,062	99
1954	0.58	43	7.1	5.9	11	67	425	1,780	4,347	8,583	86
1955	0.65	48	5.8	9.5	11	73	475	1,997	4,868	9,531	96
1956	0.54	58	5.4	5.5	11	57	437	2,072	5,040	9,754	98
1957	0.45	39	4.8	4.0	11	65	431	2,034	4,683	8,503	92
1958	0.54	40	7.3	9.3	10	69	434	2,044	5,181	9,506	98
1959	0.57	40	6.2	5.2	12	53	411	1,958	5,126	9,624	96

Females											
1949	0.58	28	5.3	7.2	11	36	132	473	1,779	6,673	104
1950	0.57	34	4.5	6.9	10	35	107	431	1,582	6,197	95
1951	0.60	41	4.8	6.3	13	41	142	608	2,102	8,019	124
1952	0.47	37	5.2	8.5	11	29	94	369	1,375	5,241	81
1953	0.55	45	5.0	5.7	13	35	98	433	1,501	5,875	91
1954	0.41	30	6.8	5.3	8.2	24	95	330	1,133	4,358	68
1955	0.41	25	3.6	4.6	11	29	94	366	1,321	4,768	76
1956	0.35	31	4.5	4.0	10	34	89	384	1,293	4,889	77
1957	0.35	34	6.5	5.0	12	30	93	330	1,104	3,547	61
1958	0.40	32	5.3	6.4	11	31	103	390	1,168	4,067	68
1959	0.47	32	3.5	4.5	8.2	30	92	359	1,161	3,883	65

**Table XC. Bronchitis: Death rates per million living, by sex, at ages 15-44, 45-64, and 65 and over, and Standardised Mortality Ratios, in standard regions and urban and rural aggregates within regional groups, 1959, England and Wales**

	15-		45-		65 and over		S.M.R. (Persons all ages)
	M	F	M	F	M	F	
ENGLAND AND WALES ...	24	15	1,074	215	6,594	2,185	100
Urban and rural aggregates:							
Conurbations ...	28	17	1,394	264	8,684	2,960	130
Areas outside conurbations:							
Urban areas with populations of 100,000 and over ...	31	14	1,151	241	7,008	2,165	105
Urban areas with populations of 50,000 and under 100,000 ...	24	9	1,074	258	6,612	1,774	94
Urban areas with populations under 50,000 ...	22	13	876	165	5,685	1,754	84
Rural districts ...	15	14	640	138	4,213	1,454	66
NORTH OF ENGLAND							
Regions:							
Northern ...	35	19	1,094	194	5,338	2,010	93
East and West Ridings ...	39	21	1,224	309	7,887	2,632	123
North Western ...	33	26	1,533	336	8,131	2,929	132
Total ...	35	22	1,341	297	7,397	2,647	121
Conurbations:							
Tyneside ...	18	23	1,539	304	6,417	2,566	119
West Yorkshire ...	38	30	1,402	357	9,200	2,898	135
South East Lancashire ...	44	31	1,812	429	9,505	3,651	157
Merseyside ...	41	34	1,669	234	8,327	3,034	136
Total ...	38	30	1,633	354	8,765	3,179	142
Areas outside conurbations:							
Urban areas with populations of 100,000 and over ...	45	17	1,423	302	7,808	2,755	126
Urban areas with populations of 50,000 and under 100,000 ...	24	—	1,165	349	7,637	2,334	115
Urban areas with populations under 50,000 ...	36	18	1,065	217	6,315	2,114	101
Rural districts ...	23	20	804	174	4,616	1,612	78
MIDLANDS AND EASTERN							
Regions:							
North Midland ...	28	9	1,007	218	6,224	2,038	98
Midland ...	25	12	1,251	228	7,257	2,362	112
Eastern ...	17	10	651	140	4,404	1,511	66
Total ...	23	10	996	198	5,987	1,979	93
Conurbation:							
West Midlands ...	32	8	1,592	240	9,068	2,964	139
Areas outside conurbation:							
Urban areas with populations of 100,000 and over ...	28	12	1,041	230	6,655	2,112	100
Urban areas with populations of 50,000 and under 100,000 ...	25	8	1,201	303	6,504	1,877	102
Urban areas with populations under 50,000 ...	19	12	829	143	5,418	1,774	80
Rural districts ...	18	10	636	162	4,372	1,516	69
GREATER LONDON ...	19	10	1,161	201	8,523	2,798	119
SOUTH OF ENGLAND							
Regions:							
London and South Eastern (excluding Greater London) ...	10	13	685	125	5,128	1,352	67
Southern ...	9	6	702	106	4,827	1,463	69
South Western ...	12	18	593	136	4,206	1,220	59
Total ...	10	13	654	124	4,699	1,335	64
Urban areas with populations of 100,000 and over ...	14	10	958	151	5,799	1,599	80
Urban areas with populations of 50,000 and under 100,000 ...	18	18	808	150	5,758	1,325	71
Urban areas with populations under 50,000 ...	14	10	616	124	4,846	1,316	64
Rural districts ...	3	14	492	98	3,684	1,228	54
WALES (including Monmouthshire)							
Regions:							
Wales I (South East) ...	40	8	1,181	229	8,205	2,427	122
Wales II (remainder) ...	—	36	880	139	4,049	1,767	71
Urban areas with populations of 100,000 and over ...	49	16	1,196	321	9,084	2,412	130
Urban area with population of 50,000 and under 100,000 ...	93	—	1,923	—	7,576	1,944	128
Urban areas with populations under 50,000 ...	18	13	1,189	202	7,297	2,363	112
Rural districts ...	25	20	829	125	4,867	1,863	80

**Table XCI. Accidents and violence: Proportion of deaths attributed to violent causes per 100 deaths from all causes, by sex and age, 1901 to 1959, England and Wales**

	Males					Females				
	All ages	0-	15-	35-	65 and over	All ages	0-	15-	35-	65 and over
1901-10 ...	5.05	3.22	12.88	7.22	2.31	2.31	2.85	3.06	2.18	1.54
1911-20 ...	5.69	3.74	15.69	7.16	2.29	2.31	2.95	2.97	2.26	1.63
1921-30 ...	5.48	4.43	15.49	7.06	2.37	2.49	3.06	4.02	2.74	1.79
1931-35 ...	6.05	5.60	20.29	7.37	2.55	3.04	4.11	5.54	3.31	2.25
1936-40 ...	7.30	7.30	29.58	8.67	2.89	4.10	5.73	9.52	4.82	2.83
1941-45 ...	9.13	10.34	46.29	9.46	2.85	4.56	8.25	12.26	5.58	2.74
1946 ...	5.08	7.86	25.39	6.09	2.22	3.00	5.91	5.84	3.45	2.27
1947 ...	4.89	7.65	24.86	6.09	2.14	2.97	5.86	5.53	3.55	2.22
1948 ...	4.88	8.91	24.61	6.04	2.13	3.02	7.06	5.56	3.70	2.18
1949 ...	4.62	9.47	27.04	5.87	1.96	2.72	7.02	5.80	3.34	2.01
1950 ...	4.56	9.20	30.36	5.93	1.94	2.80	7.24	6.59	3.44	2.13
1951 ...	4.42	10.22	34.74	5.68	1.85	2.73	7.36	8.21	3.42	2.06
1952 ...	4.65	10.28	37.65	5.97	1.91	2.84	7.67	9.46	3.58	2.11
1953 ...	4.75	9.63	38.86	6.18	2.13	3.09	7.43	10.10	4.01	2.35
1954 ...	4.86	9.49	39.22	6.33	2.35	3.40	7.00	12.20	4.14	2.75
1955 ...	4.84	10.44	43.29	6.21	2.24	3.39	7.91	12.81	4.35	2.68
1956 ...	4.85	9.90	43.90	6.36	2.32	3.50	7.70	13.78	4.71	2.76
1957 ...	4.83	9.30	43.18	6.24	2.28	3.50	7.13	13.97	4.62	2.77
1958 ...	4.93	10.07	48.19	6.53	2.22	3.56	7.26	16.44	4.75	2.82
1959 ...	4.99	10.02	49.98	6.22	2.33	3.64	7.38	18.41	4.96	2.84

**Table XCII. Accidents and violence: Death rates per million living, by sex and age, 1901 to 1959, England and Wales**

	All ages	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over
Males												
1901-10 ...	827	1,231	329	262	447	555	677	914	1,257	1,623	1,818	2,621
1911-20 ...	857	934	395	304	596	902	828	894	1,082	1,395	1,715	2,757
1921-30 ...	709	683	375	243	449	584	536	658	917	1,259	1,616	2,842
1931-40 ...	843	735	394	261	561	773	658	716	977	1,375	1,724	3,638
1941-50 ...	778	726	459	319	571	648	582	613	781	1,075	1,413	2,832
1951 ...	591	487	259	190	362	608	474	429	591	814	1,137	2,745
1952 ...	568	473	217	167	415	643	445	436	546	796	1,092	2,450
1953 ...	582	418	215	151	373	603	446	429	583	822	1,198	2,811
1954 ...	593	393	168	161	369	580	426	445	583	846	1,256	3,214
1955 ...	605	386	207	181	444	671	446	444	567	823	1,243	3,166
1956 ...	604	392	173	151	410	608	442	428	578	874	1,259	3,320
1957 ...	594	351	168	156	456	644	421	456	566	845	1,197	3,126
1958 ...	614	361	196	163	481	636	469	483	584	854	1,130	3,268
1959 ...	615	352	185	164	574	704	448	442	560	833	1,261	3,183
Females												
1901-10 ...	329	1,059	226	81	103	111	135	198	307	423	752	2,287
1911-20 ...	300	767	234	98	117	120	127	179	272	382	728	2,364
1921-30 ...	283	487	182	71	117	127	126	168	268	397	716	2,516
1931-40 ...	412	537	215	108	183	192	199	239	355	523	1,005	3,399
1941-50 ...	407	546	231	135	169	179	187	221	313	446	791	2,808
1951 ...	321	350	96	45	88	87	85	126	228	327	648	2,803
1952 ...	298	330	100	50	77	86	85	120	213	322	604	2,406
1953 ...	329	319	94	62	73	86	88	139	232	349	670	2,727
1954 ...	358	264	86	48	81	90	107	138	239	357	783	3,066
1955 ...	370	300	94	59	94	85	96	143	241	377	775	3,128
1956 ...	383	284	87	52	76	91	101	140	260	412	764	3,242
1957 ...	374	279	83	45	79	98	103	145	258	396	762	2,991
1958 ...	390	255	86	52	91	115	103	148	271	380	792	3,166
1959 ...	399	259	82	67	101	130	113	156	253	416	784	3,163

**Table XCIII. Motor vehicle accidents: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1931 to 1959, England and Wales**

	All ages	0-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over	S.M.R.† (1950-52 = 100)
<b>Males</b>												
1931-35 ...	208	184	93	204	368	210	133	153	206	363	678	143
1936-40 ...	216	159	86	176	363	209	152	171	257	411	749	146
1941-45 ...	199	198	113	152	227	193	149	160	228	353	556	130
1946 ...	153	144	109	161	205	139	109	102	160	241	498	99
1947 ...	146	134	75	127	209	139	106	111	147	246	460	95
1948 ...	126	135	63	122	173	112	79	97	142	194	400	82
1949 ...	140	123	80	147	226	117	103	101	137	229	451	91
1950 ...	151	104	60	177	279	164	106	102	153	242	439	98
1951 ...	161	112	88	178	308	174	112	117	160	231	505	105
1952 ...	149	105	73	165	301	150	123	105	144	219	403	97
1953 ...	158	98	61	170	307	164	110	126	160	245	518	103
1954 ...	161	77	57	194	323	165	116	127	170	259	564	105
1955 ...	171	83	64	234	388	170	125	130	164	273	540	111
1956 ...	174	86	61	236	344	182	121	138	185	270	587	113
1957 ...	170	74	58	254	378	164	130	125	166	263	604	111
1958* ...	186	81	68	305	386	175	140	142	191	271	638	121
1959* ...	202	77	67	384	476	180	137	147	207	319	626	131
<b>Females</b>												
1931-35 ...	68	106	34	49	50	31	29	49	95	181	267	169
1936-40 ...	64	84	30	49	48	29	27	45	85	173	279	158
1941-45 ...	56	106	42	42	40	29	26	37	61	107	172	128
1946 ...	47	72	30	36	27	21	20	27	56	100	185	105
1947 ...	47	71	26	37	23	17	22	33	54	100	177	104
1948 ...	43	79	31	25	16	14	19	21	49	101	157	96
1949 ...	41	65	32	32	30	10	16	22	44	95	151	91
1950 ...	46	64	25	40	30	17	19	35	48	84	200	101
1951 ...	49	58	22	47	37	19	23	35	54	101	198	107
1952 ...	42	52	21	34	31	19	18	28	43	94	168	92
1953 ...	45	56	25	36	37	16	18	33	49	87	181	97
1954 ...	51	45	15	36	37	23	23	32	63	120	218	109
1955 ...	55	52	26	58	45	22	26	32	57	121	235	117
1956 ...	56	47	22	42	40	26	26	38	63	129	236	119
1957 ...	53	42	22	42	46	24	22	37	59	117	222	111
1958* ...	60	43	23	50	49	29	23	43	65	144	254	126
1959* ...	69	48	25	60	67	32	28	48	81	146	289	143

\* According to the Seventh Revision of the International Classification (Nos. E810-E835). Other years according to the classification in use at the time.

† S.M.R.s are based on civilian deaths and civilian populations for the years 1940-1949 inclusive.

Table XCIV. Motor vehicle accidents: Deaths by sex according to nature of injury and external cause, 1959, England and Wales

Nature of injury (Intermediate List)			Total deaths in motor vehicle accidents E810-E835	External cause of injury and ICD No.							Remainder of E810-E835	
				MOTOR VEHICLE TRAFFIC ACCIDENTS								
				E812 to pedestrian	E813 to pedal cyclist	E814 to rider or passenger of motorcycle in collision with non-motor vehicle or object	E815 to rider or passenger of motorcycle in collision with other motor vehicle	E816 Other motor vehicle traffic accident involving two or more motor vehicles	E821 to rider of motorcycle without antecedent collision	E822 involving overturning in roadway		E823 involving running off roadway
Total ... ..	M F	4,414 1,612	1,299 979	524 90	57 4	977 77	626 253	396 51	55 20	271 75	61 26	148 37
AN 138 Fracture of skull ... ..	M F	2,234 687	635 426	320 55	43 3	549 37	211 65	243 37	27 6	114 28	34 15	58 15
AN 139 Fracture of spine and trunk ... ..	M F	419 235	167 169	36 5	1	60 7	64 38	27	11 4	27 10	5	21 2
AN 140 Fracture of limbs ... ..	M F	164 115	84 85	12	—	36	12 16	4 1	—	7 3	4 2	5 8
AN 141 Dislocation without fracture ... ..	M F	16 3	3	—	—	3	2 1	6	— 2	1	—	1
AN 142 Sprains and strains of joints and adjacent muscles ... ..	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
AN 143 Head injury (excluding fracture) ... ..	M F	549 214	183 127	59 17	9	116 10	73 33	46 10	5	34 8	8 6	16 3
AN 144 Internal injury of chest, abdomen, and pelvis ... ..	M F	707 219	133 105	68 10	3 1	151 17	193 59	54 2	5 3	63 15	6 2	31 5
AN 145 Laceration and open wounds ... ..	M F	86 34	30 22	5	—	12 1	20 9	7	—	6 1	2	4 1
AN 146 Superficial injury, contusion and crushing with intact skin surface ... ..	M F	10 6	9 5	—	—	—	1	—	— 1	—	—	—
AN 147 Effects of foreign body entering through orifice ... ..	M F	1 —	— —	— —	— —	— —	1 —	— —	— —	— —	— —	— —
AN 148 Burns ... ..	M F	6 3	— —	— —	— —	3 1	2 1	— —	1	— 1	— 1	— —
AN 149 Effects of poisons ... ..	M F	1 —	— —	— —	— —	— —	— —	— —	— —	— —	1 —	— —
AN 150 All other and unspecified effects of external causes ... ..	M F	221 96	55 40	24 3	1	47 4	47 31	9 1	6 4	19 9	1 1	12 3

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Table XCV. Deaths of pedestrians, pedal cyclists, motorcyclists, motor vehicle occupants, and others in motor vehicle traffic accidents, motor vehicle non-traffic accidents, and other road vehicle accidents, by sex, 1941 to 1959, England and Wales

	1941-45 (annual average)		1946-49 (annual average)		1950-54 (annual average)		1955		1956		1957		1958		1959																
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F															
<b>Pedestrians:</b>																															
Motor vehicle traffic accidents ...	2,073	898	1,295	706	1,185	719	1,210	813	1,275	844	1,219	753	1,323	900	1,299	979															
Motor vehicle non-traffic accidents ...																	43	8	52	9	47	9	40	6	37	4	39	4			
Other road vehicle accidents ...																	166	70	79	47	63	36	43	31	45	29	38	22	25	33	17
<b>Pedal cyclists:</b>																															
Motor vehicle traffic accidents ...	557	140	464	86	462	77	437	84	458	67	428	68	446	56	524	90															
Motor vehicle non-traffic accidents ...																	1	—	1	—	2	—	—	—	—	—	—	—	—	—	—
Other road vehicle accidents ...																	230	51	159	29	138	27	131	19	101	9	126	21	119	17	81
<b>Motorcyclists:</b>																															
Motor vehicle traffic accidents ...	651	27	659	48	1,018	83	1,179	89	1,132	88	1,179	96	1,251	104	1,430	132															
Motor vehicle non-traffic accidents ...																	8	—	18	—	5	—	5	—	7	—	9	—	9	1	
<b>Motor vehicle occupants and others:</b>																															
Motor vehicle traffic accidents ...	762	167	549	155	519	175	726	270	790	285	782	302	946	340	1,092	406															
Motor vehicle non-traffic accidents ...																	64	2	33	2	31	4	18	—	24	1	20	—			
Other road vehicle accidents ...																	47	11	26	6	27	11	17	6	11	5	6	7	8	16	14

**Table XCVI. Suicide: Death rates per million living, by sex and age, in standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1955-59, England and Wales**

	Males					Females				
	All ages over 15	15-	25-	45-	65 and over	All ages over 15	15-	25-	45-	65 and over
<b>ENGLAND AND WALES</b>	<b>192</b>	<b>43</b>	<b>117</b>	<b>264</b>	<b>423</b>	<b>114</b>	<b>20</b>	<b>64</b>	<b>171</b>	<b>184</b>
<b>Urban and rural aggregates:</b>										
Conurbations ... ..	205	55	129	273	463	125	25	73	181	213
<i>Areas outside conurbations:</i>										
Urban areas with populations of 100,000 and over ... ..	195	33	116	257	492	126	21	69	190	211
Urban areas with populations of 50,000 and under 100,000 ... ..	206	45	129	278	456	132	16	76	193	223
Urban areas with populations under 50,000 ... ..	187	41	110	257	395	108	14	53	173	168
Rural districts ... ..	166	34	99	254	343	81	16	49	128	115
<b>Regional summary:</b>										
Northern ... ..	190	46	110	280	419	90	10	60	134	153
East and West Ridings ... ..	205	54	128	263	472	113	27	48	175	204
North Western ... ..	217	54	129	289	498	128	19	63	189	233
North Midland ... ..	186	33	105	268	425	103	9.1	60	150	190
Midland ... ..	196	39	114	273	511	113	16	56	181	208
Eastern ... ..	170	32	111	237	360	109	19	66	166	162
London and South										
Eastern ... ..	195	49	126	264	396	125	27	82	179	189
Southern ... ..	158	46	93	230	353	106	19	57	172	152
South Western ... ..	188	29	120	258	410	118	18	66	186	160
Wales (including Monmouthshire) ... ..	167	23	96	244	352	78	17	41	131	106
<b>Conurbations:</b>										
Tyneside ... ..	224	62	125	304	550	115	14	70	152	258
West Yorkshire ... ..	222	77	128	286	496	124	27	57	182	210
South East Lancashire ... ..	238	64	147	312	536	129	22	67	191	223
Merseyside ... ..	155	32	104	217	362	94	14	50	137	198
West Midlands ... ..	197	41	118	259	555	121	17	59	193	233
Greater London ... ..	199	56	131	267	417	130	31	86	183	205

Table XCVII. Suicide: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1901 to 1959, England and Wales

	All ages	0-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over	S.M.R.* (1950-52 = 100)
<b>Males</b>												
1901-10...	157	1	4	36	91	152	252	397	523	508	382	170
1911-20...	130	—	3	32	69	122	196	278	389	405	350	138
1921-30...	166	—	2	31	78	111	211	346	487	513	438	149
1931-35...	196	0	2	40	96	140	210	379	542	533	483	163
1936-40...	172	—	2	32	89	118	177	284	462	477	466	113
1941-45...	126	—	3	43	72	100	128	185	271	347	382	93
1946 ...	138	—	5	31	49	94	154	200	300	391	465	103
1947 ...	136	—	3	35	59	94	123	209	314	382	480	100
1948 ...	144	—	2	29	74	86	134	219	338	469	388	108
1949 ...	144	—	1	32	60	80	134	236	334	422	490	109
1950 ...	136	—	1	30	60	70	122	222	323	416	421	102
1951 ...	135	—	6	24	53	78	120	213	303	410	477	100
1952 ...	132	—	1	34	55	78	120	198	320	389	413	98
1953 ...	142	—	1	28	67	89	126	222	325	411	480	106
1954 ...	149	—	3	26	59	93	145	235	340	430	439	110
1955 ...	143	—	4	26	54	97	130	213	322	422	463	105
1956 ...	149	—	2	25	65	94	130	221	350	426	490	109
1957 ...	146	—	2	27	60	94	135	217	344	404	475	107
1958 ...	146	—	2	28	64	104	147	219	329	366	457	106
1959 ...	142	—	2	29	54	105	135	206	316	417	406	104
<b>Females</b>												
1901-10...	49	—	3	34	45	56	81	109	108	88	49	103
1911-20...	47	—	2	30	41	50	74	100	102	81	52	92
1921-30...	63	—	1	25	43	57	87	135	143	108	63	110
1931-35...	80	—	0	23	49	77	108	154	166	134	84	129
1936-40...	79	—	1	14	38	65	99	155	169	142	89	122
1941-45...	62	—	1	9	22	52	77	108	128	117	73	91
1946 ...	74	—	1	15	26	53	87	135	157	146	92	108
1947 ...	76	—	—	10	28	51	80	134	160	166	114	110
1948 ...	78	—	—	11	20	50	80	141	183	173	98	113
1949 ...	75	—	1	15	26	45	77	127	165	165	138	109
1950 ...	70	—	1	10	23	34	75	124	157	153	115	101
1951 ...	72	—	—	9	20	38	66	135	160	167	105	103
1952 ...	68	—	1	11	12	35	66	118	154	164	97	97
1953 ...	76	—	3	10	22	39	79	127	167	171	127	108
1954 ...	81	—	—	12	23	52	77	135	167	198	130	115
1955 ...	84	—	1	7	19	45	75	148	190	201	126	119
1956 ...	90	—	1	11	27	49	71	156	203	217	141	126
1957 ...	92	—	1	12	30	47	80	145	214	230	136	129
1958 ...	91	—	—	13	33	50	83	151	190	208	162	127
1959 ...	89	—	1	14	33	50	88	140	200	195	137	124

\* S.M.R.s are based on civilian deaths and civilian populations for the years 1940-1949 inclusive.

Table XCVIII. Suicide: Proportions per 1,000 deaths according to external agent, by sex and age, 1955-59, England and Wales

	Males					Females				
	All ages 15 and over	15-	35-	55-	75 and over	All ages 15 and over	15-	35-	55-	75 and over
Domestic gas poisoning ...	437	458	439	420	472	561	600	544	561	586
Other poisoning ...	141	143	179	123	74	221	196	244	214	198
Hanging or strangulation	166	158	157	175	169	60	47	61	61	63
Drowning ...	84	42	66	104	118	99	63	96	111	89
Firearms or explosives ...	65	87	64	61	50	5	14	6	2	4
Cutting and piercing instruments	43	22	31	55	67	13	13	11	15	13
Jumping from high place	21	25	19	21	27	23	26	17	24	40
Other agents ...	43	65	46	39	23	18	40	22	13	7
<b>Total ...</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>
Total number of suicides	15,701	2,099	5,484	6,588	1,530	10,377	1,013	3,691	4,844	829



Table XCIX. Accidents in the home and residential institutions: Deaths and death rates per million living, by sex and age, 1959, England and Wales

Age Group	Sex	Type of Accident	All accidents in the home and residential institutions (E870-E936)		Poisoning by utility (illuminating) gas (E890)		Burns and scalds (E916, E917)		Fall on stairs, from ladders, and from one level to another (E900-E902)		Fall on same level (E903)		Unspecified falls (E904)		Other accidents in the home and residential institutions (rem. E870-E936)	
			Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
			Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
All ages	Deaths	...	2,519	4,491	341	520	249	470	549	758	433	1,316	360	910	587	517
	Rate	...	115	191	16	22	11	20	25	32	20	56	16	39	27	22
0-4	Deaths	...	347	261	1	4	47	49	30	22	1	1	3	3	265	182
	Rate	...	196	155	0.6	2.4	27	29	17	13	0.6	0.6	1.7	1.8	150	108
5-14	Deaths	...	64	53	6	2	18	36	6	4	1	—	—	—	33	11
	Rate	...	18	16	1.7	0.6	5.1	11	1.7	1.2	0.3	—	—	—	9.3	3.2
15-44	Deaths	...	203	142	56	22	10	28	35	14	4	4	7	4	91	70
	Rate	...	23	16	6.3	2.4	1.1	3.1	3.9	1.6	0.4	0.4	0.8	0.4	10	7.8
45-64	Deaths	...	407	402	98	86	38	60	106	65	28	27	24	38	113	126
	Rate	...	73	66	18	14	6.8	9.8	19	11	5.0	4.4	4.3	6.2	20	21
65-74	Deaths	...	397	739	65	130	42	94	102	145	77	167	68	130	43	73
	Rate	...	283	360	46	63	30	46	73	71	55	81	49	63	31	56
75 and over	Deaths	...	1,101	2,894	115	276	94	203	270	508	322	1,117	258	735	42	35
	Rate	...	1,622	2,340	169	223	138	164	398	411	474	903	380	594	62	44

Table C. Accidents in the home and residential institutions: Deaths by month of occurrence, 1952-57, 1958 and 1959, England and Wales

ICD No.	Cause of death	Year	PERSONS											
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
E870-E888	Poisoning	1952-57	104	96	110	100	98	82	88	97	86	112	83	90
		1958	18	19	25	24	11	23	21	10	15	21	21	27
		1959	27	12	21	29	25	25	17	20	19	23	20	11
E890-E895	Gas poisoning	1952-57	529	566	395	301	231	188	166	164	200	296	447	463
		1958	116	61	105	80	46	59	38	41	43	64	94	140
		1959	161	127	101	68	49	40	31	45	41	46	91	97
E900	Fall on stairs	1952-57	556	476	451	363	342	287	316	346	344	395	449	566
		1958	123	78	93	71	62	53	48	56	60	54	61	85
		1959	96	98	73	52	49	49	57	57	65	59	77	86
E901	Fall from ladders	1952-57	16	14	25	18	27	24	25	20	28	27	20	20
		1958	5	1	2	5	2	3	2	2	6	2	5	2
		1959	3	4	2	3	5	3	1	7	7	5	6	4
E902	Other falls from one level to another	1952-57	235	203	208	196	198	182	198	160	171	195	169	183
		1958	31	22	38	37	24	24	33	29	36	31	28	37
		1959	37	49	45	53	45	25	25	36	29	32	35	28
E903	Fall on same level	1952-57	688	706	670	527	531	532	509	540	538	591	578	650
		1958	148	131	144	134	123	103	111	119	122	131	135	166
		1959	172	211	175	132	130	121	131	119	106	134	132	162
E904	Unspecified falls	1952-57	929	851	922	747	705	601	612	545	613	675	704	857
		1958	172	140	158	128	161	136	85	96	67	79	104	142
		1959	144	148	146	95	103	90	79	80	73	90	94	115
E914	Accident caused by electric current	1952-57	22	15	25	19	14	19	19	30	21	24	31	22
		1958	9	6	4	4	2	5	4	4	4	3	4	8
		1959	4	3	2	3	10	4	3	6	8	3	2	3
E916	Accident caused by fire and explosion of combustible material	1952-57	500	549	398	307	177	172	143	123	126	220	282	426
		1958	86	71	96	61	33	29	25	14	15	29	33	80
		1959	122	111	69	42	44	33	22	23	17	28	49	63
E917	Accident caused by hot substance, corrosive liquid, and steam	1952-57	70	67	64	58	45	56	35	30	31	48	60	45
		1958	24	11	19	10	8	9	2	7	5	5	9	11
		1959	11	14	7	5	11	8	6	4	4	7	6	14
E921	Inhalation and ingestion of food causing obstruction or suffocation	1952-57	226	192	235	187	149	123	128	96	132	173	153	214
		1958	37	25	38	36	32	16	18	17	22	32	27	29
		1959	31	34	31	33	15	21	18	19	14	17	34	41

Table C—continued

ICD No.	Cause of death		PERSONS											
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
E924 ...	Accidental mechanical suffocation in bed and cradle ... ..	1952-57	138	109	115	97	101	96	87	92	78	97	106	121
		1958	18	20	25	15	10	10	8	11	8	13	25	15
		1959	18	13	11	8	10	11	6	8	13	10	9	19
E929 ...	Drowning and submersion ... ..	1952-57	16	19	28	38	35	52	28	33	35	29	27	21
		1958	5	5	8	10	9	6	2	3	6	6	5	2
		1959	5	6	5	3	3	5	6	7	6	3	6	2
Rem.E870- E936	All other accidents ... ..	1952-57	169	257	129	130	121	107	102	114	95	87	81	84
		1958	22	31	19	21	17	26	20	14	17	24	19	27
		1959	21	24	19	15	17	28	20	28	17	19	12	35
E870-E936	All accidents in the home and residential institutions ... ..	1952-57	4,198	4,120	3,775	3,088	2,774	2,521	2,456	2,390	2,498	2,969	3,190	3,762
		1958	814	621	774	636	540	502	417	423	426	494	570	771
		1959	852	854	707	541	516	463	422	459	419	476	573	680

Table CI. Accidents in the home and residential institutions: Deaths by cause and sex at age 65 and over, 1959, England and Wales

ICD No.	Cause of death	Home			Residential institutions		
		Males	Females	Persons	Males	Females	Persons
E870-E888	Accidental poisoning by solid and liquid substances ... ..	24	43	67	2	1	3
E871 ...	Accidental poisoning by barbituric acid and derivatives ... ..	18	34	52	—	—	—
E883 ...	Accidental poisoning by corrosive aromatics, acids, and caustic alkalis ... ..	1	2	3	—	—	—
Rem. E870-E888	Accidental poisoning by other solid and liquid substances ... ..	5	7	12	2	1	3
E890-E895	Accidental poisoning by gases and vapours ... ..	188	411	599	—	—	—
E890 ...	Accidental poisoning by utility (illuminating) gas ... ..	180	406	586	—	—	—
Rem. E890-E895	Accidental poisoning by other gases and vapours ... ..	8	5	13	—	—	—
E900-E904	Accidental falls ... ..	856	2,204	3,060	241	598	839
E900 ...	Fall on stairs ... ..	219	429	648	7	12	19
E901 ...	Fall from ladders ... ..	27	9	36	—	—	—
E902 ...	Other falls from one level to another ... ..	75	128	203	44	75	119
E903 ...	Fall on same level ... ..	256	900	1,156	143	384	527
E904 ...	Unspecified falls ... ..	279	738	1,017	47	127	174
E910-E936	Other accidents ... ..	166	341	507	21	35	56
E916 ...	Accident caused by fire and explosion of combustible material ... ..	115	252	367	4	5	9
E917 ...	Accident caused by hot substance, corrosive liquid, and steam ... ..	14	32	46	3	8	11
E921 ...	Inhalation and ingestion of food causing obstruction or suffocation ... ..	15	9	24	8	11	19
E929 ...	Accidental drowning and submersion ... ..	5	12	17	—	1	1
Rem. E910-E936	Remainder of other accidents ... ..	17	36	53	6	10	16
E870-E936	All accidents in the home and residential institutions ... ..	1,234	2,999	4,233	264	634	898

**Table CII. Accidents in the home and residential institutions: Deaths by cause, sex, and age, 1959, England and Wales**

ICD No.	Cause of death	All ages	0-	5-	15-	45-	65-	75 and over
E870-E888	Accidental poisoning by solid and liquid substances ...	M 110	12	—	23	49	12	14
		F 142	4	—	32	62	31	13
E871	Accidental poisoning by barbituric acid and derivatives ...	M 71	—	—	17	36	9	9
		F 103	1	—	21	47	24	10
E872	Accidental poisoning by aspirin and salicylates ...	M 8	5	—	—	3	—	—
		F 14	1	—	4	6	1	2
E890-E895	Accidental poisoning by gases and vapours ...	M 371	3	7	66	107	73	115
		F 533	5	2	25	90	133	278
E900	Fall on stairs ...	M 323	5	1	21	70	60	166
		F 499	3	—	10	45	106	335
E901	Fall from ladder ...	M 38	—	—	3	8	14	13
		F 11	—	—	—	2	5	4
E902	Other falls from one level to another ...	M 188	25	5	11	28	28	91
		F 248	19	4	4	18	34	169
E903	Fall on same level ...	M 433	1	1	4	28	77	322
		F 1,316	1	—	4	27	167	1,117
E904	Unspecified falls ...	M 360	3	—	7	24	68	258
		F 910	3	—	4	38	130	735
E914	Accident caused by electric current ...	M 26	9	3	9	4	—	1
		F 26	3	—	7	11	2	3
E916	Accident caused by fire and explosion of combustible material ...	M 213	32	18	10	34	38	82
		F 411	38	34	24	58	85	172
	Burns by clothing ...	M 66	9	7	2	9	15	24
		F 263	21	27	17	38	54	106
	from domestic fire (open) ...	M 18	5	3	—	1	2	7
		F 85	10	10	4	10	14	37
	gas fire, stove, etc. ...	M 4	2	—	—	1	1	1
		F 39	1	6	3	6	5	18
	electric fire ...	M 7	—	—	1	2	2	2
		F 57	2	2	3	7	17	26
	other specified ...	M 31	—	4	1	4	9	13
		F 41	5	4	5	9	4	14
	not specified ...	M 6	2	—	—	2	1	1
		F 41	3	5	2	6	14	11
	Burns by falling into fire ...	M 31	—	—	1	4	6	20
		F 38	—	1	—	4	11	22
	Burns by conflagration ...	M 47	12	6	1	7	5	16
		F 41	9	3	2	5	8	14
	Burns by other specified means ...	M 58	7	4	6	12	11	18
		F 62	7	2	5	10	11	27
	Burns by means not specified ...	M 11	4	1	—	2	—	4
		F 7	1	1	—	1	1	3
E917	Accident caused by hot substance, corrosive liquid, and steam ...	M 36	15	—	—	4	5	12
		F 59	11	2	4	2	9	31
E921	Inhalation and ingestion of food causing obstruction or suffocation ...	M 165	100	1	16	25	11	12
		F 137	74	4	13	26	11	9
E924	Accidental mechanical suffocation in bed or cradle ...	M 80	77	—	2	—	1	—
		F 59	56	—	2	1	—	—
E929	Accidental drowning and submersion ...	M 18	5	2	2	4	4	1
		F 39	9	2	4	11	8	5
Rem. E870-E936	Other accidents ...	M 158	60	26	29	22	7	14
		F 101	35	5	9	11	18	23
E870-E936	All accidents in the home and residential institutions ...	M 2,519	347	64	203	407	397	1,101
		F 4,491	261	53	142	402	739	2,894

**Table CIII. Accidental falls: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1901 to 1959, England and Wales**

	All ages	0-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over	S.M.R.† (1950-52 = 100)
Males												
1901-10	84	45	25	23	24	39	69	119	209	420	1,253	169
1911-20	107	38	30	39	36	56	93	155	254	454	1,373	213
1921-30	85	25	18	31	31	37	56	93	161	352	1,306	146
1931-35	93	25	18	31	33	37	47	79	146	338	1,609	146
1936-40	120	31	24	34	40	51	58	95	177	414	1,910	178
1941-45	109	35	26	40	30	41	58	87	157	337	1,448	156
1946	86	27	21	25	26	30	43	57	107	245	1,203	115
1947	97	31	26	33	42	36	50	68	108	254	1,352	126
1948	80	27	22	22	27	37	41	49	85	211	1,122	104
1949	78	20	18	28	31	33	38	57	68	185	1,162	100
1950	74	14	18	19	25	29	34	50	71	183	1,139	93
1951	86	17	17	17	34	35	40	51	85	241	1,275	108
1952	79	16	17	23	30	30	30	47	78	221	1,169	99
1953	84	14	10	22	29	30	33	52	80	246	1,254	104
1954	99	11	9	20	23	27	39	52	86	280	1,659	122
1955	94	14	16	13	25	28	38	44	85	248	1,574	115
1956	99	9	15	16	31	25	34	45	77	281	1,698	120
1957	92	15	13	20	21	23	29	47	78	262	1,491	111
1958*	92	14	10	15	27	28	32	41	82	232	1,561	112
1959*	96	15	11	17	21	27	34	46	87	259	1,588	116
Females												
1901-10	68	27	6	4	4	10	26	64	132	389	1,657	143
1911-20	69	20	6	5	5	8	20	50	108	356	1,752	132
1921-30	73	13	4	4	4	5	10	31	85	318	1,845	117
1931-35	100	14	5	3	3	6	8	30	92	388	2,283	138
1936-40	136	18	6	4	5	6	12	34	123	476	2,714	167
1941-45	118	17	8	5	6	6	11	26	81	346	2,135	127
1946	110	15	4	3	5	6	6	11	59	260	2,037	110
1947	111	11	7	9	4	4	5	15	58	286	1,947	108
1948	100	11	4	4	4	3	4	18	51	231	1,726	94
1949	105	10	6	3	2	2	4	13	50	232	1,840	98
1950	113	8	2	2	1	3	5	14	45	230	1,994	103
1951	117	9	—	2	5	3	3	12	46	240	2,034	105
1952	105	9	2	2	5	2	5	11	44	218	1,743	92
1953	123	7	4	2	2	4	5	15	50	241	2,018	106
1954	141	6	3	3	1	3	5	13	45	295	2,249	118
1955	144	8	3	2	—	2	6	15	50	281	2,261	118
1956	149	8	3	2	4	2	5	13	50	275	2,338	120
1957	142	9	2	1	2	2	5	14	40	250	2,178	111
1958*	149	6	2	—	3	1	5	12	41	273	2,247	115
1959*	151	12	3	1	1	4	5	12	46	259	2,234	115

\*According to the Seventh Revision of the International Classification (Nos. E900-E904). Other years according to the classification in use at the time.

†S.M.R.s are based on civilian deaths and civilian populations for the years 1940-1949 inclusive.

Table CIV. Accidental deaths: Deaths, infant mortality rates per 1,000 live births, and death rates per million living at all ages and ages over one year, by sex and age, 1959, England and Wales

Cause of death (and ICD No.)	Rate per million living (All ages)	Deaths												
		All ages	0-	1-	5-	10-14	Total under 15	15-	25-	45-	65 and over	Total aged 15 and over		
<b>Home accidents*:</b>														
Coal gas poisoning (E890) ...	{M F}	16 22	341 520	— —	1 4	— —	1 2	5 2	7 6	14 6	42 16	98 86	180 406	334 514
Other poisoning (E870-E888, E891-E895) ...	{M F}	6 7	140 155	— —	2 5	— —	— —	1 —	15 5	7 6	26 29	58 66	34 49	125 150
Falls (E900-E904) ...	{M F}	61 127	1,342 2,984	12 7	22 19	6 3	1 1	41 30	4 1	42 21	158 130	1,097 2,802	1,301 2,954	
Burns and scalds (E916, E917) ...	{M F}	11 20	249 470	11 9	36 40	12 24	6 12	65 85	1 10	9 18	38 60	136 297	184 385	
Choking and suffocation (E921, E922, E924, E925) ...	{M F}	12 9	268 213	171 130	21 9	2 2	1 2	195 143	5 5	16 12	27 29	25 24	73 70	
Other (Remainder of E870-E936) ...	{M F}	8 6	179 149	35 18	24 20	12 3	17 4	88 45	21 3	16 15	28 31	26 55	91 104	
<b>Total home accidents (E870-E936) ...</b>	<b>{M F}</b>	<b>115 191</b>	<b>2,519 4,491</b>	<b>231 164</b>	<b>116 97</b>	<b>33 32</b>	<b>31 21</b>	<b>411 314</b>	<b>52 31</b>	<b>151 111</b>	<b>407 402</b>	<b>1,498 3,633</b>	<b>2,108 4,177</b>	
<b>Transport accidents:</b>														
Motor vehicle road accidents involving injury to:—														
Motorcyclist† (E814, E815, E821) ...	{M F}	65 6	1,430 132	2 —	1 2	1 2	4 2	8 6	806 71	399 35	186 20	31 —	1,422 126	
Pedal cyclist (E813) ...	{M F}	24 4	524 90	— —	5 2	16 7	72 14	93 23	74 17	84 20	165 25	108 5	431 67	
Pedestrian (E812) ...	{M F}	59 42	1,299 979	1 3	111 70	97 49	35 25	244 147	77 22	90 44	266 205	622 561	1,055 832	
Occupant of motor vehicle (Remainder of E810-E825) ...	{M F}	50 17	1,092 406	5 2	10 12	8 6	13 3	36 23	271 72	360 85	319 136	106 90	1,056 383	
<b>Other road accidents, involving injury to:—</b>														
Pedal cyclist (E843) ...	{M F}	4 1	81 21	— —	— —	2 2	9 6	11 8	9 6	12 1	35 4	14 2	70 13	
Pedestrian (E840-E842, E844) ...	{M F}	1 1	17 26	— —	1 —	— —	— —	1 —	— —	1 —	1 5	14 21	16 26	
All other transport accidents:— including rail, air, water (Remainder of E800-E866) ...	{M F}	25 2	555 50	1 —	11 4	11 3	19 2	42 9	105 9	178 5	195 13	35 14	513 41	
<b>Total transport accidents (E800-E866) ...</b>	<b>{M F}</b>	<b>228 73</b>	<b>4,998 1,704</b>	<b>9 5</b>	<b>139 90</b>	<b>135 69</b>	<b>152 52</b>	<b>435 216</b>	<b>1,342 197</b>	<b>1,124 190</b>	<b>1,167 408</b>	<b>930 693</b>	<b>4,563 1,488</b>	
<b>Other accidents:</b>														
Poisonings (E870-E895) ...	{M F}	6 3	127 75	— —	1 1	3 —	— —	4 1	4 4	37 17	55 25	27 28	123 74	
Falls (E900-E904) ...	{M F}	35 24	763 554	1 3	3 4	7 3	19 4	30 14	52 1	142 6	195 40	344 493	733 540	
Burns (E916, E917) ...	{M F}	3 1	71 16	— —	— 1	— 2	3 —	3 3	4 1	34 1	21 5	9 6	68 13	
Drowning (E929) ...	{M F}	32 7	701 175	— 2	61 14	103 8	63 23	227 47	112 8	112 24	136 61	114 35	474 128	
Other (Remainder of E870-936) ...	{M F}	41 4	892 95	27 19	18 6	23 4	29 10	97 39	139 5	300 9	293 16	63 26	795 56	
<b>Total other accidents (E870-E936) ...</b>	<b>{M F}</b>	<b>117 39</b>	<b>2,554 915</b>	<b>28 24</b>	<b>83 26</b>	<b>136 17</b>	<b>114 37</b>	<b>361 104</b>	<b>311 19</b>	<b>625 57</b>	<b>700 147</b>	<b>557 588</b>	<b>2,193 811</b>	
<b>Total all accidents (E800-E936) ...</b>	<b>{M F}</b>	<b>460 303</b>	<b>10,071 7,110</b>	<b>268 193</b>	<b>338 213</b>	<b>304 118</b>	<b>297 110</b>	<b>1,207 634</b>	<b>1,705 247</b>	<b>1,900 358</b>	<b>2,274 957</b>	<b>2,985 4,914</b>	<b>8,864 6,476</b>	
All accidents (E800-E936) Infant mortality rate and death rate per million living ...	{M F}	460 303	0.69 0.53	243 161	181 74	159 62	227 125	589 86	315 58	410 156	1,435 1,494	535 351		

\*Including deaths in residential institutions.

†Including passengers.

## MORTALITY ACCORDING TO MARITAL STATUS

It has long been realised that among the many factors operating in the selection of pairs of people for marriage, one of the most important is that of health, both mental and physical. While there is occasional marriage of people with similar disabilities it is a fair generalisation to say that disabling disease or abnormality in a young adult lessens the chance of marriage. This being the case one would expect the mortality experience of single persons to differ from that of those who have been married. In addition to this the conditions of life differ for single and married people. For example, it is commonly believed that the single man is more likely to die a violent death. On the other hand a married man probably has greater incentive and may receive greater encouragement to follow a strict regime when he is suffering from a chronic debilitating disease.

Table CV (page 169) shows that at all ages, except the oldest for males, the death rates for single persons exceeds that of the married.

The excess mortality is greatest in young middle age, the peak being reached slightly earlier for women. The table below shows the ratio of the mortality for single to that of married persons by age and sex:

	Ratio of death rate of single to married	
	Males	Females
15-	1.43	1.05
25-	1.93	2.03
35-	2.03	1.92
45-	1.53	1.35
55-	1.36	1.21
65-	1.16	1.14
75 and over	1.00	1.44

The highest ratio in young middle age may be accounted for by the effect of selection reaching its peak soon after the normal age of marriage is passed. After that, while selection will still play some part, what might be called the results of remaining single become more important, the overall effect being adverse, so that the mortality for these people remains high but not relatively so high as at the younger ages.

A general analysis of the individual causes of death which might play a part in producing the high mortality among single persons has not previously been made. Table CVI (page 170) shows standardised mortality ratios for selected causes of death according to marital status.

For males, it occasionally happens that marital status is not known and for this reason ratios for some causes of death have not been calculated. This applies particularly to violent deaths where the information is usually derived from a coroner's certificate which has not provided for a statement of marital status in the case of males.

Certain causes stand out as being responsible for relatively more deaths among single than married persons. In both sexes tuberculosis mortality is high among single persons. This is probably the result of both selection for marriage and of the worse living conditions of many single persons.

Deaths assigned to virus diseases are also much higher among the single person. It seems probable that the reason for the increased mortality results largely from poliomyelitis. Sufferers from the more serious late effects of this disease will be unlikely to marry.

Among the malignant neoplasms, several interesting facts can be seen. That carcinoma of the breast is commoner among single women has long been known. Cancer of the corpus uteri and of the ovary are also more commonly a cause of death among single women. Cancer of the stomach, often associated with poverty, is less often found among single persons, but on the other hand cancer of the oesophagus is more frequent among the same group. Cancer of the buccal cavity and pharynx and of the larynx is more commonly seen among single males but there is no similar excess among single women. Among the forms of cancer seen less often in single people cancer of the prostate in men and of the cervix in women stand out.

Fibromyomata and benign ovarian tumours are more commonly a cause of death among single women.

Although deaths from thyrotoxicosis are rare among males they are relatively more frequent among the single, although the numbers are small. There is also an excess among single women but this is not so marked.

Two disease groups with very small numbers of deaths are iron deficiency anaemias and presenile psychosis but in both cases there is a marked excess among single persons. The latter group is particularly interesting provided the diagnosis was accurately made, for presenile psychosis is the result of organic brain disease which does not usually make its appearance before the age of 40. Some supporting evidence of this is found in the Mental Health Enquiry\* where the admission rate in 1958 for presenile psychosis was higher, age for age, among single persons.

The effect of selection for marriage is seen in the higher mortality of single persons from chronic rheumatic heart disease.

Diseases of veins cause higher mortality among single persons. This group of diseases includes thrombophlebitis and venous thrombosis and pulmonary embolism and it is possible that the higher mortality might arise from the poorer nursing that these persons get at home when they are ill.

So far, discussion in this section has been restricted to the comparison of mortality experience of single and married persons. Although some unexpected results have been shown it has not been difficult to account for the higher mortality among single persons. When considering the mortality of widowed

\*Registrar General's Statistical Review, Supplement on Mental Health for the Two Years 1957-1958. H.M.S.O., London.

and divorced persons, however, the problem appears more difficult. Table CV shows that at all ages and for both sexes the mortality of the widowed and divorced is higher than for the married. Part of the explanation for this excess is that the average age of the widowed and divorced is slightly higher than that for the married in the same age-group. This is shown in the table below.

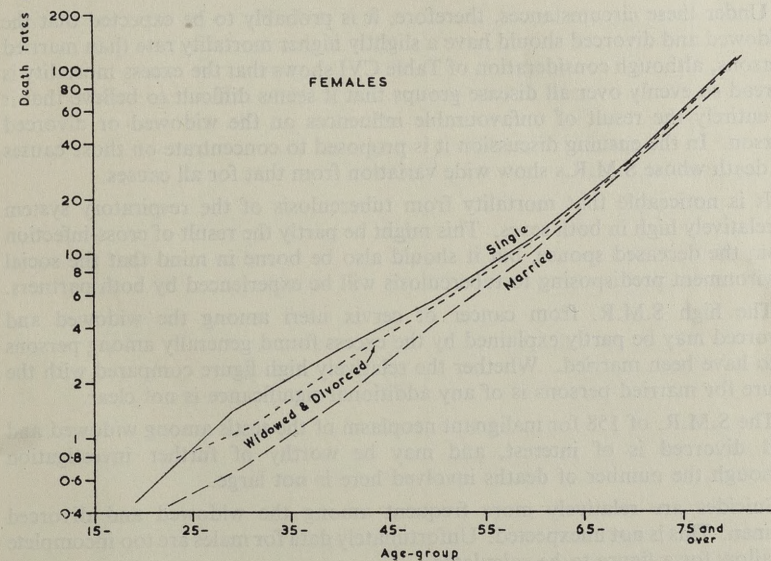
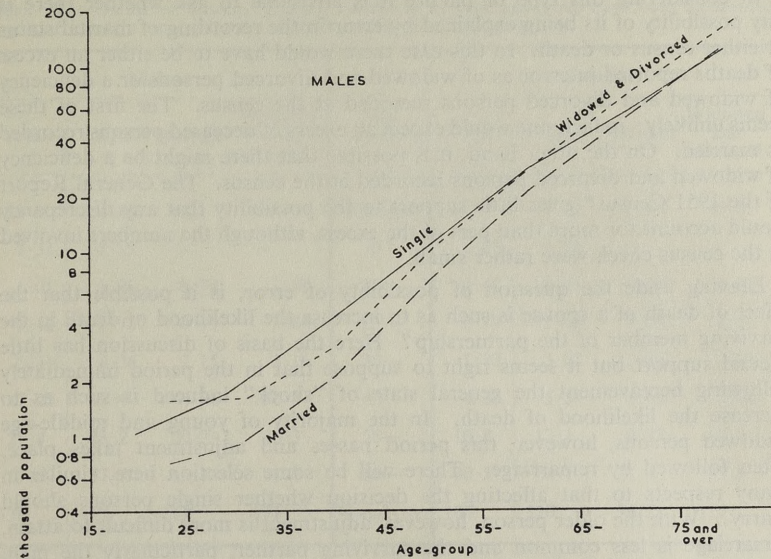
Average age of the population in certain age-groups by sex and marital condition, 1951 Census

	Males			Females		
	Single	Married	Widowed and divorced	Single	Married	Widowed and divorced
15-24... ..	19.6	23.3	23.2	19.2	22.6	23.3
25-34... ..	28.9	30.2	31.1	29.2	30.0	31.0
35-44... ..	39.7	40.1	40.3	40.1	40.0	40.4
45-54... ..	49.5	49.7	50.3	49.8	49.7	50.7
55-64... ..	59.8	59.7	60.6	59.8	59.6	60.5
65-74... ..	69.6	69.4	70.3	69.7	69.2	70.0
75 and over ...	79.4	79.0	80.5	80.3	78.7	80.7

That the higher average age is not the whole explanation is seen from Diagram 7 which has been plotted with the points for the mortality rates in each age-group placed according to the average of the group instead of at the mid-point of the group, as is the usual practice.

It is noticeable that the excess mortality is greater among males than females.

Diagram 7



Death rates per 1,000 living, by sex, age and marital condition, 1959, England and Wales

Table CVI, which will be discussed in more detail later, shows that with one or two exceptions the excess mortality is spread evenly over all causes of death.

In considering this type of picture it is advisable to ask whether there is any possibility of its being explained by error in the recording of marital status at either census or death. In this case there would have to be either an excess of deaths reported in error as of widowed and divorced persons or a deficiency of widowed and divorced persons recorded at the census. The first of these seems unlikely; in fact, one would expect an excess of deceased persons recorded as married. On the other hand, it is possible that there might be a deficiency of widowed and divorced persons recorded at the census. The General Report of the 1951 Census\* gives little support to the possibility that any discrepancy would account for more than part of the excess, although the numbers involved in the census check were rather small.

Leaving aside the question of possibility of error, is it possible that the effect of death of a spouse is such as to increase the likelihood of death in the surviving member of the partnership? Here the basis of discussion has little factual support but it seems right to suppose that in the period immediately following bereavement the general state of "shock" induced is such as to increase the likelihood of death. In the majority of young and middle-age widowed persons, however, this period passes and adjustment takes place, often followed by remarriage. There will be some selection here, similar in many respects to that affecting the decision whether single persons should marry. With the older person, however, adjustment is more difficult to attain, remarriage is less common and the surviving partner, particularly the man, may live under relatively unfavourable conditions.

Under these circumstances, therefore, it is probably to be expected that the widowed and divorced should have a slightly higher mortality rate than married persons, although consideration of Table CVI shows that the excess mortality is spread so evenly over all disease groups that it seems difficult to believe that it is entirely the result of unfavourable influences on the widowed or divorced person. In the ensuing discussion it is proposed to concentrate on those causes of death whose S.M.R.s show wide variation from that for all causes.

It is noticeable that mortality from tuberculosis of the respiratory system is relatively high in both sexes. This might be partly the result of cross-infection from the deceased spouse, but it should also be borne in mind that the social environment predisposing to tuberculosis will be experienced by both partners.

The high S.M.R. from cancer of cervix uteri among the widowed and divorced may be partly explained by the excess found generally among persons who have been married. Whether the relatively high figure compared with the figure for married persons is of any additional significance is not clear.

The S.M.R. of 158 for malignant neoplasm of the testis among widowed and divorced is of interest, and may be worthy of further investigation although the number of deaths involved here is not large.

Suicides are relatively more frequent among the widowed and divorced women. This is not unexpected. Unfortunately data for males are too incomplete to allow for a figure to be calculated.

\*Census 1951, England and Wales: General Report, p.43. H.M.S.O., London.

**Table CV. All causes: Death rates per thousand living\*, by sex, age, and marital condition, 1959, England and Wales**

Note. The deaths of unstated marital condition in each age-group have been distributed proportionately among those of stated condition in the age-group.

Total	Males			Age-group	Females			
	Single	Married	Widowed and divorced		Total	Single	Married	Widowed and divorced
12.3	4.10	14.1	81.6	All ages	11.0	5.47	6.61	49.0
2.33	2.33	—	—	0—	1.83	1.83	—	—
1.01	1.06	0.74	1.58	15—	0.44	0.45	0.43	0.79
1.12	1.76	0.91	1.64	25—	0.79	1.40	0.69	1.17
2.41	4.36	2.15	3.16	35—	1.78	3.07	1.60	2.63
7.22	10.4	6.81	10.4	45—	4.36	5.50	4.06	5.60
21.8	28.2	20.7	30.3	55—	10.8	12.1	9.97	12.6
53.6	57.5	49.7	71.7	65—	30.5	31.1	27.4	33.5
138	117	117	171	75 and over	106	110	76.2	115

\*Total population.



**Table CVI. Standardised Mortality Ratios, by sex and marital condition (all conditions at ages 15 and over = 100), for certain causes, 1959, England and Wales**

Note. The deaths of unstated marital condition have been distributed proportionately among those of stated condition.

ICD No.	Cause of death	Males			Females		
		Single	Married	Widowed and divorced	Single	Married	Widowed and divorced
	All causes ...	108	91	129	107	86	109
001-008	Tuberculosis of respiratory system	186	82	158	143	81	124
010-019	Tuberculosis, other forms ...	200	81	118	146	94	85
020-029	Syphilis and its sequelae ...	111	94	124	89	85	120
080-096	Diseases attributable to viruses ...	200	74	127	153	84	101
140-205	Malignant neoplasms ...	95	97	115	103	95	106
140-148	Buccal cavity and pharynx ...	140	87	126	88	90	117
150	Oesophagus ...	133	92	116	123	88	104
151	Stomach ...	94	97	115	84	93	111
153	Large intestine, except rectum ...	90	97	116	102	92	106
154	Rectum ...	105	95	116	105	94	104
155	Biliary passages and liver (stated to be primary site) ...	103	98	108	79	95	113
157	Pancreas ...	85	98	116	92	95	108
161	Larynx ...	131	89	131	84	100	107
162, 163	Trachea, bronchus and lung ...	92	99	113	90	99	106
170	Breast ...	118	99	97	123	96	97
171	Cervix uteri ...				39	101	127
712	Corpus uteri ...				139	89	99
173, 174	Other parts of uterus, including chorionepithelioma and uterus unspecified ...				112	88	115
175	Ovary, Fallopian tube and broad ligament ...				140	92	96
176	Other and unspecified female genital organs ...				103	93	105
177	Prostate ...	69	97	117			
178	Testis ...	116	91	158			
179	Other and unspecified male genital organs ...	123	94	110			
180	Kidney ...	91	99	115	108	90	110
181	Bladder and other urinary organs	82	98	114	102	89	109
194	Thyroid gland ...	109	99	100	112	93	104
201	Hodgkin's disease ...	102	101	89	107	99	96
204	Leukaemia and aleukaemia ...	97	102	93	110	97	100
200, 202, 203, 205	Other neoplasms of lymphatic and haematopoietic tissues ...	91	102	94	120	96	97
214	Uterine fibromyoma ...				172	97	65
216	Benign neoplasm of ovary ...				163	84	95
240-245	Allergic disorders ...	118	95	117	108	98	98
250-254	Diseases of thyroid gland ...	117	93	127	123	96	96
252	Thyrotoxicosis with or without goitre ...	148	91	124	119	103	88

**Table CVI—continued**

ICD No.	Cause of death	Males			Females		
		Single	Married	Widowed and divorced	Single	Married	Widowed and divorced
253	Myxoedema and cretinism ...	91	93	132	125	86	103
260	Diabetes mellitus ...	131	87	131	75	101	108
290	Pernicious and other hyperchromic anaemias ...	108	89	123	107	86	106
291	Iron deficiency anaemias (hypochromic anaemias) ...	250	67	129	121	69	113
305	Presenile psychosis ...	242	92	49	148	102	71
300-304, 306-326	Other mental, psychoneurotic, and personality disorders ...	*	*	*	157	68	104
330-334	Vascular lesions affecting central nervous system ...	104	89	127	105	87	107
350	Paralysis agitans ...	93	95	117	139	91	95
353	Epilepsy ...	*	*	*	278	44	88
410-416	Chronic rheumatic heart disease...	124	95	114	114	94	104
420	Arteriosclerotic heart disease, including coronary disease ...	89	98	115	97	92	107
421, 422	Degenerative heart disease ...	113	78	140	111	66	111
430-434	Other diseases of heart ...	112	86	133	103	82	110
440-443	Hypertensive heart disease ...	108	88	132	92	89	109
444-447	Other hypertensive disease ...	107	92	127	92	88	111
460-466	Diseases of veins ...	129	92	117	111	86	109
540-545	Diseases of stomach and duodenum	151	87	129	114	83	109
581	Cirrhosis of liver ...	108	93	140	86	98	110
584, 585	Cholelithiasis, cholecystitis ...	91	97	113	67	101	110
587	Diseases of pancreas ...	88	97	120	78	92	117
590-594	Nephritis and nephrosis ...	117	94	114	105	96	103
600-609	Other diseases of urinary system ...	120	89	127	93	87	114
620-637	Diseases of female genital organs...				56	106	111
640-689	Deliveries and complications of pregnancy, childbirth, and the puerperium ...				38	119	104
E890 (.0 and .7)	Accidental poisoning by utility (illuminating) gas in the home and residential institution ...	*	*	*	154	60	112
E900-E904 (.0 and .7)	Accidental falls in the home and residential institution ...	*	*	*	116	66	110
E970-E979	Suicide and self-inflicted injury ...	*	*	*	131	81	136

\*Owing to the high proportion of unstated marital condition, Standardised Mortality Ratios have not been calculated. The numbers of deaths were as follows:—

ICD No.	Cause of death	Single	Married	Widowed and divorced	Not stated
300-304, 306-326	Other mental, psychoneurotic, and personality disorders	87	130	71	28
353	Epilepsy ...	227	68	18	33
E890 (.0 and .7)	Accidental poisoning by utility (illuminating) gas in the home and residential institution ...	43	64	58	176
E900-E904 (.0 and .7)	Accidental falls in the home and residential institution...	102	259	229	752
E970-E979	Suicide and self-inflicted injury ...	326	954	267	1,569

## CONGENITAL MALFORMATIONS

As the infant mortality rate continues its decline one would expect that further reductions will become more and more difficult to achieve. One of the large sections of infant mortality which is becoming predominant, as other more easily preventible causes of infant death are removed, is that due to congenital malformations. Until fairly recent years it was thought that little could be done to prevent their occurrence except by the prevention of conception, and this only in rare instances. Now, however, the picture is changing as we come to understand more of the aetiology of congenital malformations.

This more hopeful attitude was one of the prime factors leading to the introduction of registration of causes of stillbirths in England and Wales by the Population (Statistics) Act, 1960, for if we are to continue to reduce infant mortality then more must be known of the epidemiology of congenital malformations. One of the tools in this study is that of national vital statistics. Although any detailed study on causes of stillbirths in England and Wales will not be possible until 1961 data are available, it is proposed to present a short introductory section on congenital malformations in this report and to follow it in the next report with a somewhat fuller study of aspects of the same subject.

In any study of mortality from congenital malformations it must be remembered that 28 per cent of that recorded occurs in the first week of life and 69 per cent in the first year. Thus death very often takes place before any firm diagnosis has been made and a considerable proportion may be "lost" under more general headings such as prematurity.

At the same time the particular malformation recorded depends to a certain extent on its external appearance. For example, a child born and dying soon after birth with a severe degree of exomphalos will probably have its death certified as due to this cause, when a detailed examination might have revealed other gross abnormalities.

Further, it should be remembered that many children with relatively minor congenital malformations may live a normal life and die many years later of some completely unrelated cause. In other words, study of mortality from congenital malformations only touches part of the problem.

Table CVII (page 178) shows that the crude death rate from congenital malformations has remained relatively constant over the last 30 years. At the same time there has been some reduction in the infant mortality rate from the same cause. This reached a low level in the years between 1946 and 1953 and since then has been somewhat higher. As with all studies of time trends in mortality it is difficult to separate real from apparent differences. It would seem probable, however, that the initial fall from 1930 onwards was part of the general fall in the infant mortality rate. With the increased awareness of the importance of congenital malformations it is possible that the stability of the rate in the 1950's is compounded of a real fall in mortality together with increased use

of specific terms in certification. At the same time it seems reasonable to suppose that any decrease in infant mortality that may have occurred from congenital malformations as a whole in the last decade cannot have been a very large one.

In considering time trends for specific causes of death the same problems considered above are also relevant, although knowledge of specific advances in treatment can be brought more into the discussion. For example, Table CVIII (page 179) shows quite a considerable reduction in the number of deaths assigned to congenital hypertrophic pyloric stenosis which is almost certainly the result of more efficient treatment of the condition. The same can be said of the reduction in mortality from cleft palate and harelip, although this is a condition which is rarely fatal by itself and increased recognition of accompanying, more fatal, conditions may have played some part here.

Deaths assigned to monstrosity have increased over the past decade by an amount greater than would be accounted for by any increase in the birth rate. As virtually all these deaths occur in the first few days of life it is best to compare time trends of deaths from monstrosity per 1,000 live births. This is done in the table below:

	1949	1959
Males	0·08	0·13
Females	0·12	0·32
Both sexes	0·10	0·22

Anencephalic babies make up the majority of the group of "monstrosities". This is a condition which is easily recognised, and incompatible with more than a few days of life. Data from Scotland\* show that the majority are stillborn. It is impossible to be certain that time trends of this nature are not the result of more accurate certification of cause of death, although with anencephaly the deformity is so well known and so easily recognised that it would seem unlikely that this could account for all the recorded increase. *Prima facie* then, there appears to be some evidence of a real increase taking place in the number of monsters born. It is hoped to report on this in more detail in the next Commentary. It is worth noting that there has been a similar increase in stillbirths assigned to anencephaly in Scotland over the same period\*.

Table CIX (page 180) shows the age and sex distribution of deaths assigned to congenital malformations in 1955-59. It has been found necessary to combine deaths from spina bifida and hydrocephalus owing to change in rules of assignment made in 1958. The effect of this was allowed for in Table CVIII.

The age-sex patterns shown by Table CIX vary very much as would be expected from our knowledge of the behaviour of these conditions, e.g. the early death in infants with imperforate anus to the death in middle age of patients with polycystic kidneys.

\*Annual Report of Registrar General for Scotland, 1959, Table 21A. H.M.S.O. Edinburgh.

The month of occurrence of deaths assigned to congenital malformations is shown in Table CX (page 181). Deaths from monstrosity appear to be fairly evenly spread throughout the year, contrary to what has been recorded elsewhere, e.g. McKeown and Record (1951\*), but many of the other conditions show an excess of deaths in the winter months very probably resulting from the greater frequency of intercurrent infections during these months in persons already weakened by congenital deformity.

Table CXI (page 182) shows the death rates from congenital malformations in counties (including associated county boroughs) in England and Wales and also in the metropolitan boroughs, and the same data are shown diagrammatically in Diagrams 8 and 9. In England and Wales there are some wide differences, the death rate varying from 66 per million in Merionethshire to 167 in Radnorshire. Diagram 8 shows that areas with high rates are concentrated largely in South and East Wales, the Midlands and the North of England.

In London, although there is a wide range of death rates, it is difficult to see any clear pattern. The abnormally high rate for Holborn Met. B. is due to deaths there of children from abroad treated at the Hospital for Sick Children, Great Ormond Street. These deaths cannot be assigned to place of residence.

Table CXII (page 183) shows the infant mortality rate from congenital malformations by cause and region. Generally, the rate is similar for each group of malformations in all regions with one important exception. This is the group of malformations of the central nervous system (including spina bifida and hydrocephalus). For this group rates are very much lower in the southern and eastern parts of the country and the table below shows that differences in mortality from this group of malformations is sufficient to account for a very large part of the regional differences from all malformations. The biggest part of deaths from congenital malformations of the central nervous system is due to those assigned to spina bifida and meningocele but all have been combined in the table below because there are a number of cases in which more than one malformation is mentioned.

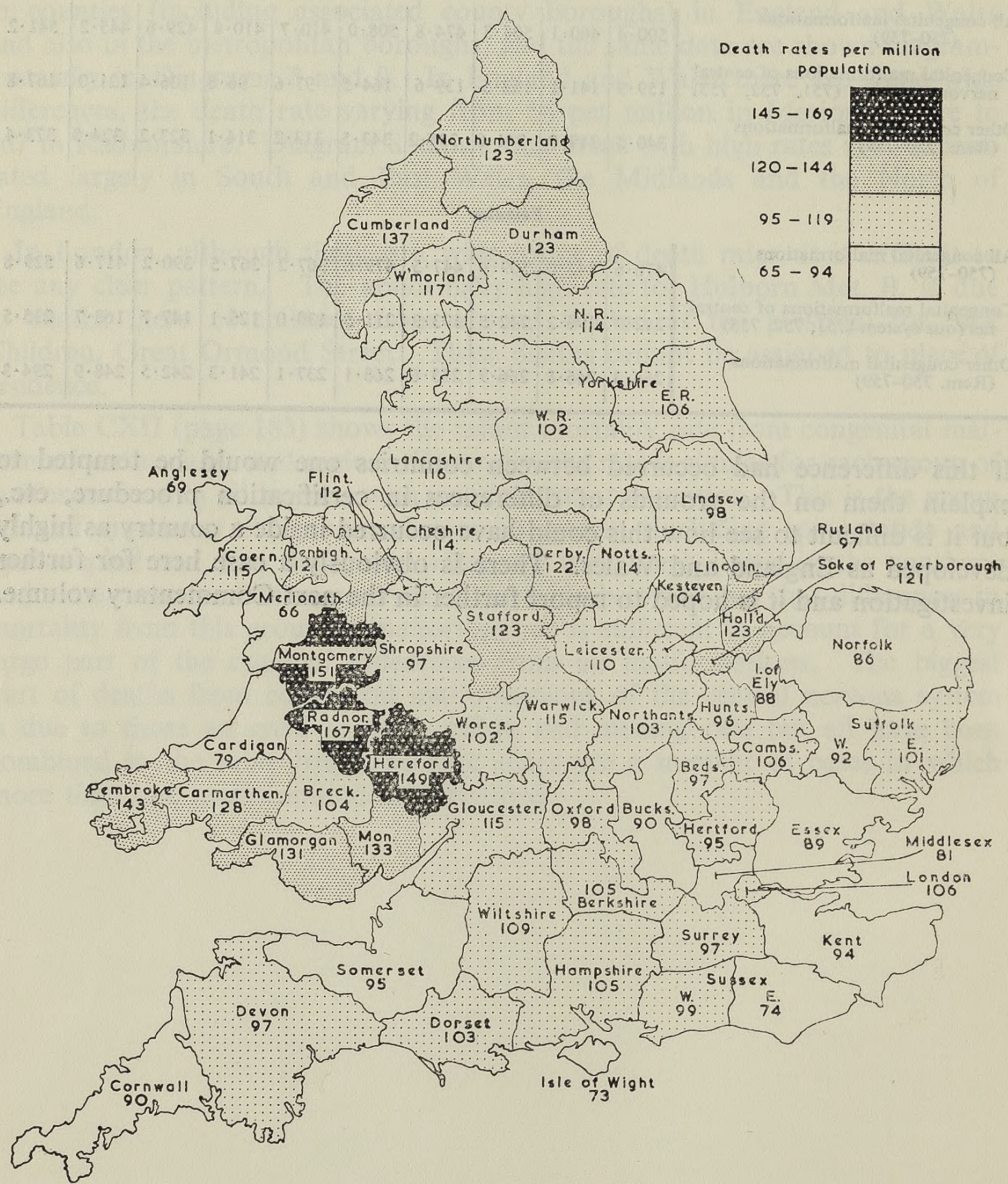
\*McKEOWN, T. and RECORD, R.G. 1951. Seasonal incidence of congenital malformations of the central nervous system. *Lancet*, vol. I, 1951, pp. 192-196.

Regional infant mortality rates per 100,000 live births, 1950-58

Cause of death (and ICD No.)	Northern	East and West Ridings	North Western	North Midland	Midland	Eastern	London and South Eastern	Southern	South Western	Wales	
											Males
All congenital malformations (750-759)	500.4	460.1	504.3	474.8	508.0	410.7	410.8	429.6	445.2	541.2	
Congenital malformations of central nervous system (751, 752, 753)	159.9	141.1	162.5	139.6	164.5	97.6	96.8	106.4	121.0	167.8	
Other congenital malformations (Rem. 750-759)	340.5	319.0	341.8	335.2	343.5	313.2	314.1	323.2	324.3	373.4	
	Females										
All congenital malformations (750-759)	476.6	443.0	509.4	447.5	479.6	367.2	367.5	390.2	417.6	529.8	
Congenital malformations of central nervous system (751, 752, 753)	212.3	196.2	242.5	193.9	211.5	130.0	126.1	147.7	168.7	235.5	
Other congenital malformations (Rem. 750-759)	264.3	246.8	266.9	253.6	268.1	237.1	241.3	242.5	248.9	294.3	

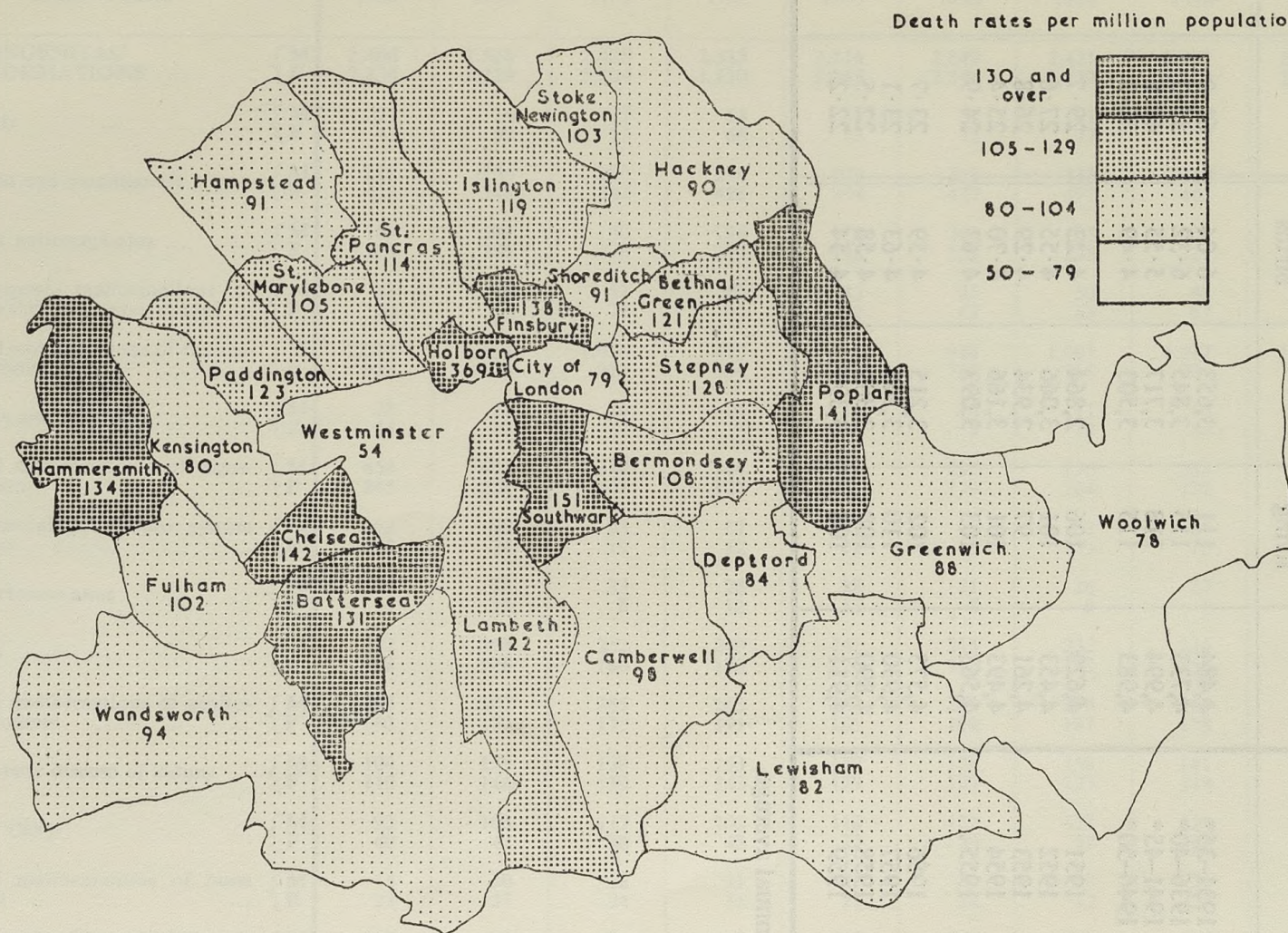
If this difference had occurred between countries one would be tempted to explain them on the grounds of differences in certification procedure, etc., but it is difficult to see how this could have occurred inside a country as highly developed as England and Wales. There is obviously a case here for further investigation and it is hoped to report further in the next Commentary volume.

**Diagram 8**



**Congenital malformations: Death rates per million living, in counties (including associated county boroughs), 1955-59, England and Wales**

Diagram 9



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Congenital malformations: Death rates per million living, in City of London and metropolitan boroughs, 1955-59

Table CVII. Deaths and death rates from congenital malformations, infant mortality and stillbirth rates, 1931 to 1959, England and Wales

	Congenital malformations				Total infant mortality per 1,000 live births	Stillbirths per 1,000 total births
	All ages		Under 1 year			
	Deaths	Rate per million living	Deaths	Rate per 1,000 live births		
1931-35*	4,484	111	3,653	6.04	61.9	41.0
1936-40*	4,733	115	3,845	6.32	55.3	38.5
1941-45*	4,994	118	3,717	5.55	49.8	30.5
1946-50*	4,983	115	3,503	4.49	36.3	24.0
1951	4,629	106	2,864	4.23	29.7	23.0
1952	4,453	101	3,066	4.55	27.6	22.7
1953	4,261	97	2,934	4.29	26.8	22.4
1954	4,493	101	3,166	4.70	25.4	23.5
1955	4,563	103	3,093	4.63	24.9	23.2
1956	4,575	102	3,215	4.59	23.7	22.9
1957	4,930	110	3,348	4.63	23.1	22.5
1958	4,890	108	3,389	4.58	22.5	21.5
1959	4,911	108	3,398	4.54	22.2	20.8

\*Annual average.

Table CVIII. Congenital malformations: Deaths by cause and sex, 1949 to 1959, England and Wales

ICD No.	Cause of death	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
750-759	CONGENITAL MALFORMATIONS	{ M 2,406 F 2,238	{ M 2,528 F 2,220	{ M 2,425 F 2,204	{ M 2,323 F 2,130	{ M 2,216 F 2,045	{ M 2,349 F 2,144	{ M 2,431 F 2,132	{ M 2,442 F 2,133	{ M 2,589 F 2,341	{ M 2,589 F 2,301	{ M 2,503 F 2,408
750	Monstrosity ... ..	{ M 32 F 43	{ M 34 F 50	{ M 37 F 53	{ M 54 F 66	{ M 33 F 77	{ M 51 F 72	{ M 41 F 77	{ M 59 F 73	{ M 57 F 96	{ M 59 F 106	{ M 50 F 115
751	Spina bifida and meningocele ...	{ M 276 F 433	{ M 266 F 348	{ M 290 F 382	{ M 294 F 428	{ M 279 F 394	{ M 328 F 477	{ M 343 F 477	{ M 348 F 462	{ M 328 F 462	{ M 340 F 458	{ M 301 F 411
752	Congenital hydrocephalus ... ..	{ M 189 F 228	{ M 202 F 236	{ M 180 F 178	{ M 195 F 217	{ M 170 F 198	{ M 201 F 222	{ M 185 F 235	{ M 209 F 221	{ M 201 F 223	{ M 201 F 243	{ M 237 F 275
753	Other congen: malformations of nerv: sys'm and sense organs ...	{ M 48 F 60	{ M 50 F 59	{ M 52 F 74	{ M 62 F 41	{ M 43 F 62	{ M 65 F 62	{ M 50 F 63	{ M 48 F 67	{ M 83 F 74	{ M 61 F 68	{ M 69 F 76
754	Congenital malformations of circulatory system ... ..	{ M 1,044 F 923	{ M 1,158 F 975	{ M 1,050 F 963	{ M 890 F 804	{ M 913 F 786	{ M 948 F 767	{ M 1,007 F 756	{ M 1,017 F 791	{ M 1,126 F 911	{ M 1,124 F 870	{ M 1,102 F 921
755	Cleft palate and harelip ... ..	{ M 25 F 24	{ M 21 F 20	{ M 20 F 14	{ M 24 F 7	{ M 13 F 9	{ M 16 F 8	{ M 11 F 13	{ M 16 F 15	{ M 12 F 10	{ M 11 F 6	{ M 11 F 7
756	Congenital malformations of digestive system ... ..	{ M 458 F 245	{ M 402 F 218	{ M 348 F 207	{ M 344 F 197	{ M 321 F 201	{ M 292 F 179	{ M 296 F 164	{ M 288 F 172	{ M 294 F 173	{ M 286 F 179	{ M 274 F 194
	.0 Congenital hypertrophic pyloric stenosis ... ..	{ M 152 F 33	{ M 96 F 24	{ M 63 F 19	{ M 67 F 12	{ M 52 F 12	{ M 46 F 5	{ M 38 F 3	{ M 25 F 10	{ M 27 F 7	{ M 24 F 6	{ M 20 F 4
	.1 Imperforate anus ... ..	{ M 24 F 4	{ M 38 F 16	{ M 33 F 8	{ M 28 F 12	{ M 28 F 13	{ M 31 F 8	{ M 26 F 9	{ M 27 F 6	{ M 30 F 11	{ M 11 F 4	{ M 21 F 6
	.2 Other ... ..	{ M 282 F 208	{ M 268 F 178	{ M 252 F 180	{ M 249 F 173	{ M 241 F 176	{ M 215 F 166	{ M 232 F 152	{ M 236 F 156	{ M 237 F 155	{ M 251 F 169	{ M 233 F 184
757	Congenital malformations of genito-urinary system ... ..	{ M 197 F 150	{ M 247 F 193	{ M 255 F 175	{ M 265 F 191	{ M 265 F 161	{ M 260 F 189	{ M 279 F 187	{ M 267 F 178	{ M 274 F 223	{ M 261 F 182	{ M 248 F 224
	.1 Polycystic disease of kidney ...	{ M 104 F 110	{ M 139 F 146	{ M 138 F 139	{ M 163 F 143	{ M 147 F 129	{ M 138 F 139	{ M 158 F 135	{ M 141 F 114	{ M 130 F 170	{ M 142 F 133	{ M 131 F 167
	.0, .2, .3 Other ... ..	{ M 93 F 40	{ M 108 F 47	{ M 117 F 36	{ M 102 F 48	{ M 118 F 32	{ M 122 F 50	{ M 121 F 52	{ M 126 F 64	{ M 144 F 53	{ M 119 F 49	{ M 117 F 57
758	Congenital malformations of bone and joint ... ..	{ M 15 F 23	{ M 30 F 27	{ M 32 F 24	{ M 31 F 31	{ M 27 F 21	{ M 30 F 28	{ M 27 F 32	{ M 30 F 21	{ M 32 F 39	{ M 39 F 33	{ M 29 F 34
759	Other and unspec'd congenital malformations, not elsewhere classified	{ M 122 F 109	{ M 118 F 94	{ M 161 F 134	{ M 164 F 148	{ M 152 F 136	{ M 158 F 140	{ M 192 F 128	{ M 160 F 133	{ M 182 F 130	{ M 207 F 156	{ M 182 F 151

Table CIX. Congenital malformations: Deaths by cause, sex and age, 1955-59, England and Wales

ICD No.	Cause of death		All ages	Under 1 week	1-3 weeks	4 weeks and under 1 year	Years				
							1-	5-	15-	45-	65 and over
750-759	CONGENITAL MALFORMATIONS		{M 12,554 F 11,315}	3,527 3,126	1,852 1,720	3,244 2,974	842 802	530 437	1,125 895	991 924	443 437
750	Monstrosity		{M 266 F 467}	257 450	6 12	1 3	2 —	— 2	— —	— —	— —
751	Spina bifida and meningocele, Congenital hydrocephalus		{M 2,693 F 3,467}	680 942	707 864	991 1,268	194 271	52 60	53 45	13 13	3 4
753		Other congenital malformations of nervous system and sense organs		{M 311 F 348}	57 69	22 22	74 100	75 66	37 27	30 49	12 13
754	Congenital malformations of circulatory system		{M 5,376 F 4,249}	1,330 877	647 511	1,520 1,213	372 332	312 279	696 554	381 353	118 130
755	Cleft palate and harelip		{M 61 F 51}	27 15	6 14	18 19	6 3	2 —	1 —	1 —	— —
756	Congenital malformations of digestive system		{M 1,438 F 882}	438 303	291 198	349 173	80 49	37 11	54 17	72 38	117 93
756.0	Congenital hypertrophic pyloric stenosis		{M 134 F 30}	3 —	19 4	110 24	1 —	— —	— 1	1 —	— 1
756.1	Imperforate anus		{M 115 F 36}	71 15	26 11	16 8	2 1	— —	— 1	— —	— —
756.2	Others included under 756		{M 1,189 F 816}	364 288	246 183	223 141	77 48	37 11	54 15	71 38	117 92
757	Congenital malformations of genito-urinary system		{M 1,329 F 994}	221 88	99 30	147 54	48 26	53 33	215 171	397 427	149 165
757.1	Polycystic disease of kidney		{M 702 F 719}	64 30	17 4	21 13	2 5	5 12	125 127	346 389	122 139
757.0, .2,.3	Others included under 757		{M 627 F 275}	157 58	82 26	126 41	46 21	48 21	90 44	51 38	27 26
758	Congenital malformations of bone and joint		{M 157 F 159}	59 59	14 15	24 33	13 9	7 4	16 12	16 12	8 15
759	Other and unspecified congenital malformations		{M 923 F 698}	458 323	60 54	120 111	52 46	30 21	60 47	99 68	44 28

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Table CX. Congenital malformations: Deaths by cause and month of occurrence, 1955-59, England and Wales

ICD No.	Cause of death	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
750-759	CONGENITAL MALFORMATIONS	2,233	2,033	2,149	1,983	2,072	1,881	1,844	1,774	1,795	1,994	1,989	2,135
750	Monstrosity	65	55	54	60	70	66	61	57	65	67	63	53
751	Spina bifida and meningocele, Congenital hydrocephalus	576	514	525	495	541	510	497	491	461	494	507	551
752													
753	Other congenital malformation of nervous system and sense organs	71	59	64	41	70	48	47	47	50	58	49	55
754	Congenital malformations of circulatory system	890	836	871	808	817	750	721	714	693	837	813	880
755	Cleft palate and harelip	5	10	12	16	6	12	13	6	7	5	9	11
756	Congenital malformations of digestive system	223	196	221	201	207	185	184	153	188	183	186	191
757	Congenital malformations of genito-urinary system	221	193	210	200	182	177	191	172	172	189	200	219
758	Congenital malformations of bone and joint	34	31	23	27	28	22	26	20	22	31	23	29
759	Other and unspecified congenital malformations not elsewhere classified	148	139	169	135	151	111	104	114	137	130	139	146

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Table CXI. Congenital malformations: Death rates per million living, in London A.C., metropolitan boroughs and counties (including associated county boroughs), 1955-59, England and Wales

Area	Rate	Area	Rate
<b>ENGLAND AND WALES</b>	<b>106</b>		
London A.C.	106	Herefordshire	149
City of London	78.9	Hertfordshire	95.1
Metropolitan Boroughs:		Huntingdonshire	96.4
Battersea	131	Kent	94.3
Bermondsey	108	Lancashire	116
Bethnal Green	121	Leicestershire	110
Camberwell	98.1	Lincolnshire (Parts of Holland)	123
Chelsea	142	Lincolnshire (Parts of Kesteven)	104
Deptford	84.4	Lincolnshire (Parts of Lindsey)	98.3
Finsbury	138	Middlesex	80.6
Fulham	102	Norfolk	86.2
Greenwich	87.6	Northamptonshire	103
Hackney	89.7	Northumberland	123
Hammersmith	134	Nottinghamshire	114
Hampstead	90.6	Oxfordshire	98.2
Holborn	369	Peterborough, Soke of	121
Islington	119	Rutland	97.2
Kensington	79.9	Shropshire	97.1
Lambeth	122	Somerset	94.7
Lewisham	82.1	Staffordshire	123
Paddington	123	Suffolk, East	101
Poplar	141	Suffolk, West	92.3
St. Marylebone	105	Surrey	96.7
St. Pancras	114	Sussex, East	74.3
Shoreditch	90.7	Sussex, West	99.0
Southwark	151	Warwickshire	115
Stepney	128	Westmorland	117
Stoke Newington	103	Wight, Isle of	72.6
Wandsworth	94.2	Wiltshire	109
Westminster	54.2	Worcester	102
Woolwich	77.9	Yorkshire, East Riding	106
Bedfordshire	97.4	Yorkshire, North Riding	114
Berkshire	105	Yorkshire, West Riding	102
Buckinghamshire	89.5	<b>WALES (including</b>	
Cambridgeshire	106	Monmouthshire)	
Cheshire	114	Anglesey	69.3
Cornwall	89.9	Brecknockshire	104
Cumberland	137	Caernarvonshire	115
Derbyshire	122	Cardiganshire	78.8
Devon	97.3	Carmarthenshire	128
Dorset	103	Denbighshire	121
Durham	123	Flintshire	112
Ely, Isle of	87.7	Glamorganshire	131
Essex	89.0	Merionethshire	66.2
Gloucester	115	Monmouthshire	133
Hampshire	105	Montgomeryshire	151
		Pembrokeshire	143
		Radnorshire	167

Table CXII. Congenital malformations: Deaths under one year and death rates per 100,000 live births in standard regions, 1950-58, England and Wales

Cause of death (and ICD No.)	England and Wales		Northern		East and West Ridings		North Western		North Midland		Midland		Eastern		London and South Eastern		Southern		South Western		Wales		
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	
Monstrosity (750) ...	{ M F	422 667	13.2 22.0	32 62	12.5 25.6	42 75	13.9 26.4	87 141	18.1 31.0	37 44	14.4 18.2	47 88	13.9 27.5	29 38	12.1 16.7	75 118	10.3 17.2	28 26	13.9 13.6	18 31	8.5 15.3	27 44	14.2 24.4
Spina bifida and meningocele (751)	{ M F	3,277 4,472	102.1 147.6	333 435	129.6 179.3	326 475	107.8 167.0	614 898	127.6 197.6	276 389	107.6 161.2	434 551	128.2 172.4	173 215	72.1 94.8	508 651	69.8 94.7	171 218	84.6 114.2	184 274	86.6 135.6	258 366	135.3 202.8
Congenital hydro- cephalus (752)	{ M F	722 771	22.5 25.4	63 65	24.5 26.8	75 65	24.8 22.9	120 145	24.9 31.9	67 61	26.1 25.3	92 96	27.2 30.0	41 59	17.1 26.0	137 146	18.8 21.2	38 49	18.8 25.7	50 46	23.5 22.8	39 39	20.5 21.6
Other congenital mal- formations of ner- vous system and sense organs (753)	{ M F	266 286	8.3 9.4	15 15	5.8 6.2	26 18	8.6 6.3	48 59	10.0 13.0	15 18	5.8 7.5	31 29	9.2 9.1	20 21	8.3 9.3	59 70	8.1 10.2	6 15	3.0 7.9	23 21	10.8 10.4	23 20	12.1 11.1
Congenital malforma- tions of circulatory system (754)	{ M F	5,904 4,429	184.0 146.2	462 329	179.8 135.6	529 366	174.8 128.7	858 668	178.3 147.0	450 344	175.4 142.5	661 490	195.2 153.3	440 340	183.5 149.9	1,341 1,014	184.3 147.5	393 276	194.5 144.6	394 293	185.4 145.0	376 309	197.2 171.2
Cleft palate and harelip (755) ...	{ M F	117 94	3.6 3.1	10 7	3.9 2.9	8 11	2.6 3.9	16 10	3.3 2.2	11 9	4.3 3.7	15 15	4.4 4.7	14 7	5.8 3.1	18 9	2.5 1.3	8 10	4.0 5.2	6 8	2.8 4.0	11 8	5.8 4.4
Congenital malforma- tions of digestive system (756)	{ M F	2,211 1,284	68.9 42.4	192 125	74.7 51.5	238 132	78.7 46.4	351 194	72.9 42.7	193 114	75.2 47.2	217 136	64.1 42.5	144 78	60.0 34.4	431 249	59.2 36.2	125 74	61.9 38.8	152 90	71.5 44.5	168 92	88.1 51.0
Congenital malforma- tions of genito- urinary system (757)	{ M F	773 257	24.1 8.5	71 16	27.6 6.6	63 25	20.8 8.8	134 40	27.8 8.8	64 17	24.9 7.0	86 33	25.4 10.3	56 13	23.4 5.7	182 62	25.0 9.0	29 17	14.4 8.9	47 21	22.1 10.4	41 13	21.5 7.2
Congenital malforma- tions of bone and joint (758) ...	{ M F	177 164	5.5 5.4	24 20	9.3 8.2	11 14	3.6 4.9	26 26	5.4 5.7	12 14	4.7 5.8	17 17	5.0 5.3	9 8	3.8 3.5	37 40	5.1 5.8	12 9	5.9 4.7	16 9	7.5 4.5	13 7	6.8 3.9
Other and unspecified congenital malfor- mations (759) ...	{ M F	994 824	31.0 27.2	84 82	32.7 33.8	74 79	24.5 27.8	173 134	35.9 29.5	93 70	36.3 29.0	120 78	35.4 24.4	59 54	24.6 23.8	201 167	27.6 24.3	58 51	28.7 26.7	56 51	26.4 25.2	76 58	39.9 32.1
<b>CONGENITAL MALFORMATIONS (750-759)</b>	{ M F	14,863 13,248	463.2 437.2	1,286 1,156	500.4 476.6	1,392 1,260	460.1 443.0	2,427 2,315	504.3 509.4	1,218 1,080	474.8 447.5	1,720 1,533	508.0 479.6	985 833	410.7 367.2	2,989 2,526	410.8 367.5	868 745	429.6 390.2	946 844	445.2 417.6	1,032 956	541.2 529.8

### MISCELLANEOUS

#### Corrected notifications, and deaths assigned to certain uncommon infectious diseases

Some infectious diseases which represent major public health problems in some parts of the world are seldom, if ever, found in England and Wales. The last year in which a case of cholera was notified was 1948; plague and typhus fever are likewise of rare occurrence. There are other infectious diseases, for example, relapsing fever, notifications of which are confined to an odd case or two. Some non-notifiable infections are occasionally found on death certificates. Numbers of corrected notifications and deaths for a few of these uncommon infectious diseases are shown in Table CXIII together with the administrative area of assignment and the county in which the area is situated.

Two cases of relapsing fever were notified in Lancashire, neither of which proved fatal. In the ten years 1950-59 there were 7 notifications of this disease, none of them being fatal cases. There was one smallpox notification in 1959, in Liverpool, also non-fatal. One male death in Cheshire was assigned to typhus fever, but there was no corresponding notification. The only other death assigned to this cause in the last ten years was that of a female in 1953.

Four male deaths in 1959 were classified to actinomycosis, a condition responsible for 74 deaths during 1950-59. One female death was classified to brucellosis, making a total of 15 deaths for the same period.

**Table CXIII. Corrected notifications and deaths assigned to a few uncommon infectious diseases in England and Wales, 1959**

Notifications			
Disease (and ICD No.)	Administrative area of assignment	County	Number of cases
Cholera (043)	{ M F	—	—
Plague (058)	{ M F	—	—
Relapsing fever (071)	{ M F	Worsley U.D. West Lancashire R.D.	} Lancashire 1 1
Smallpox (084)	{ M F	Liverpool C.B.	
Typhus fever (100-108)	{ M F	—	—
Malaria (contracted in England and Wales) (110-117)	{ M F	—	—

**Table CXIII—continued**

Deaths			
Disease (and ICD No.)	Administrative area of assignment	County	Date of death
Cholera (043)	{ M F	—	—
Brucellosis (044)	{ M F	South Shields C.B.	Durham 31st May
Diphtheria (055)	{ M F	—	—
Plague (058)	{ M F	—	—
Anthrax (062)	{ M F	—	—
Relapsing fever (071)	{ M F	—	—
Smallpox (084)	{ M F	—	—
Rabies (094)	{ M F	—	—
Typhus fever (100-108)	{ M F	Nantwich R.D.	Cheshire 8th February
Actinomycosis (132)	{ M	East Grinstead U.D.	East Sussex 12th February
	{ M	Sedgley U.D.	Staffordshire 14th March
	{ M	Dover M.B.	Kent 2nd July
	{ F	Burnley C.B.	Lancashire 19th November

In a slightly different category is diphtheria. No deaths in 1959 were assigned to this disease. There were 102 corrected notifications, half of males and half of females. The areas of assignment are shown in Table CXIV (page 186). Of these cases, 74 (73 per cent) were notified in London Administrative County; Finsbury Met. B. accounted for 50 cases, nearly half the notifications for the country as a whole.

**Table CXIV. Corrected notifications of diphtheria, 1959, England and Wales**

Administrative area of assignment	County	Number of cases	
		M	F
Wycombe R.D.	Buckinghamshire	1	2
Derby C.B.	Derbyshire	1	
Plymouth C.B.	Devon	1	2
Bridport R.D.	Dorset		1
Liverpool C.B.	Lancashire		1
Salford C.B.	"		1
Huyton-with-Roby U.D.	"	1	1
Battersea	Met. B. London A.C.		1
Camberwell	"	4	3
Finsbury	"	29	21
Hammersmith	"	1	
Hampstead	"		1
Holborn	"		2
Islington	"	3	6
Stepney	"	2	
Stoke Newington	"		1
Amble U.D.	Northumberland	1	
Brierley Hill U.D.	Staffordshire	1	
Stafford R.D.	"		1
Coventry C.B.	Warwickshire	3	3
Kingston upon Hull C.B.	Yorkshire, E.R.		2
Leeds C.B.	Yorkshire, W.R.		1
Rotherham C.B.	"		1
Rawmarsh U.D.	"	2	
Wetherby R.D.	"	1	

**Deaths from encephalitis certified as secondary to infectious disease**

Table CXV (page 187) shows the numbers and sex-age distribution of deaths in which an infectious disease was the underlying cause, but where encephalitis was also mentioned on the certificate of cause of death, either in Part I as a complication of the infectious illness or in Part II as a condition contributing to the death.

Table CXV. Deaths from encephalitis certified as secondary to infectious disease, by underlying cause, sex, and age, 1959, England and Wales

ICD No.	Cause of death	All deaths	Deaths from encephalitis secondary to infectious disease												
			All ages	0-	1-	2-	3-	4-	5-9	10-14	15-24	25-44	45-64	65 and over	
085	Measles ... ..	M	49	5	—	3	—	—	—	2	—	—	—	—	—
		F	49	10	—	2	1	—	2	3	1	1	—	—	—
087	Chickenpox ... ..	M	10	6	—	—	—	1	1	1	1	1	—	1	—
		F	6	4	—	—	—	—	1	3	—	—	—	—	—
088	Herpes zoster ... ..	M	16	—	—	—	—	—	—	—	—	—	—	—	—
		F	33	1	—	—	—	—	—	—	—	—	—	—	1
089	Mumps ... ..	M	1	—	—	—	—	—	—	—	—	—	—	—	—
		F	7	2	—	—	—	—	—	1	—	—	1	—	—
096.0	Herpes febrilis ... ..	M	5	—	—	—	—	—	—	—	—	—	—	—	—
		F	3	1	—	—	—	—	—	—	—	—	—	1	—
116	Cerebral malaria ... ..	M	—	—	—	—	—	—	—	—	—	—	—	—	—
		F	1	1	—	—	—	—	—	—	—	—	—	1	—
480	Influenza with pneumonia ... ..	M	2,605	3	—	—	—	—	—	1	1	—	—	—	1
		F	2,533	4	2	—	—	—	—	—	—	—	—	2	—
483	Influenza with nervous manifestations, but without digestive or respiratory symptoms	M	5	4	—	—	—	—	—	1	—	2	—	—	1
		F	7	6	—	1	—	—	1	—	1	—	1	1	1
	Total ... ..	M	2,691	18	—	3	—	1	1	5	2	3	—	1	2
		F	2,639	29	2	3	1	—	4	7	2	1	2	5	2

In 1959 there were no deaths with secondary encephalitis from tuberculosis of the meninges and central nervous system, whooping cough or rubella; diseases which had been associated with secondary encephalitis in 1958. In the case of measles it is possible to relate deaths to notifications although the latter are admittedly somewhat incomplete. The results during 1955-59 were as follows:

	Corrected notifications*	Deaths		Case fatality rate per 100,000 notifications	
		Total	With encephalitis	Total	With encephalitis
1955-57	1,488,037	301	66	20.2	4.4
1958	259,308	49	12	18.9	4.6
1959	539,524	98	15	18.2	2.8

\*Including original cases in Port Health Districts.

### Tetanus

Deaths from tetanus are assigned to tetanus (ICD No. 061) when the condition follows vaccination or a slight injury such as a scratch or abrasion; if the injury is more serious, the death is assigned to the injury. There has been a considerable reduction in the deaths assigned to tetanus in recent years, but 1959 showed an increase of 5 such deaths:

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Males	61	61	59	42	37	28	23	22	23	10	17
Females	18	10	22	21	24	9	10	15	5	10	8
Persons	79	71	81	63	61	37	33	37	28	20	25

Of the 25 deaths assigned to tetanus in 1959, 12 were of children under 15 years of age.

Deaths involving tetanus but assigned to another underlying cause numbered 13 in 1959, compared with 21 in 1958; 4 of these deaths were of children under 15 years of age.

Details of all the deaths in 1959 are given in Table CXVI (page 189).

**Table CXVI. Deaths due to tetanus, by sex and age, showing cause of tetanus, 1959, England and Wales**

Age	Sex	Cause of tetanus
(a) assigned to tetanus (ICD No. 061)		
1 year	F	Tetanus*
1 "	M	Tetanus*
3 years	M	Tetanus*
4 "	M	Superficial graze or cut
4 "	F	Tetanus*
5 "	M	Small injury to knee
5 "	M	Scalding of the right ankle
5 "	F	Crushing of the right middle finger in the kitchen mangle
6 "	F	Tetanus*
8 "	M	Knee caught on a piece of old iron while playing on waste ground
9 "	M	Crush injury to finger sustained in garden
14 "	F	Accidental fall and cut knee
30 "	M	Blister caused by tight-fitting boots while working on a farm
35 "	F	Tetanus*
37 "	F	Haemorrhagic blister beneath left big toe
43 "	M	Inflammatory wound on right middle finger
45 "	M	Crushed thumb while opening a sash window
56 "	M	Sole of left foot punctured by nail
56 "	F	Tetanus*
58 "	M	Abrasion of middle toe due to fall of a car spring
61 "	M	Tetanus*
63 "	M	Cut on thumb
71 "	M	Injury to left big toe, bruised by dropping of heavy sheet plate at work
75 "	M	Tetanus*
76 "	M	Varicose ulcer
(b) assigned elsewhere		
8 days	F	Prematurity
2 months	M	Surgical repair of right inguinal hernia and umbilical hernia
4 years	F	Compound fracture of the right ulna
11 "	M	Compound fracture of the right forearm
21 "	M	Crushed finger when unloading coal from truck
25 "	M	Cut forefinger of left hand while cutting turnips on farm
32 "	M	Infected wound of left knee
47 "	F	Bitten on toe by a dog
52 "	F	Chronic abscesses of abdominal wall
61 "	M	Tetanus following an operation for removal of duodenal ulcer
67 "	M	Acute pulmonary oedema
68 "	F	Cerebral anoxia, respiratory obstruction
70 "	M	Abrasions to hand and scalp following fall in garden

\*No cause stated.

#### Deaths following vaccination or other prophylactic inoculation

This section gives details of deaths classified to ICD Nos. E940-E942, vaccinia, postvaccinal encephalitis, and other complications of smallpox vaccination, and to E943, E944, post-immunization jaundice and hepatitis, and other complications of prophylactic inoculation. Two such deaths were recorded in 1959:

- (a) female aged 3 months certified as acute encephalitis following vaccination; further investigation revealed that the death was due to an overwhelming vaccinal infection, without encephalitis.
- (b) male aged 20 years reported by the coroner as due to left ventricular failure; subsequent histological investigation revealed postvaccinal encephalomyelitis.

In addition, two deaths were classified to other underlying causes but vaccination was either mentioned on the certificate or ascertained by enquiry to have been associated with the death:

- (a) female aged 6 months certified as I(a) Convulsions, I(b) Encephalitis. Vaccination had taken place 8 days previously but encephalitis could not be attributed to this.
- (b) female aged 15 months originally certified as I(a) Encephalomyelitis, subsequently revised to I(a) Respiratory paralysis due to polyneuritis following vaccination without any definite association being established.

#### Deaths by cause, sex and age connected with the administration of anaesthetics

Table CXVII (page 191) shows that there were 414 deaths in 1959 in which there was mention of the administration of anaesthetics on the death certificate. Of these, 180 (43 per cent) were of people aged 65 and over. Of the 414 deaths, 74 (18 per cent) were classed to malignant neoplasms and a further 47 (11 per cent) to intestinal obstruction and hernia. It should be pointed out that mention of anaesthetics does not necessarily mean that they played any large part in the train of events leading to death or that the deaths mentioned include all those in which anaesthetics played a part.

Table CXVII. Deaths by cause, sex, and age, connected with the administration of anaesthetics, 1959, England and Wales

ICD No.	Cause of death	All ages		0-		5-		15-		25-		35-		45-		55-		65 and over	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	All causes	212	202	13	8	11	6	6	5	5	15	18	13	28	29	41	36	90	90
001-008	Tuberculosis of respiratory system	1	1	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
010-019	Tuberculosis, other forms ...	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
020-029	Syphilis and its sequelae ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Rem. 001-138	All other diseases classified as infective and parasitic ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
140-205	Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues ...	34	40	—	—	—	—	1	—	—	—	3	2	5	6	9	14	16	18
210-239	Benign neoplasms and neoplasms of unspecified nature ...	3	8	—	—	1	—	—	—	—	—	—	2	—	3	—	1	2	2
250-254	Diseases of thyroid gland ...	2	6	—	—	—	—	1	—	—	2	—	—	1	2	—	—	—	1
260	Diabetes mellitus ...	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	1
370-389	Diseases of eye ...	5	6	1	1	—	—	—	1	1	—	—	—	1	—	1	—	2	3
410-416	Chronic rheumatic heart disease...	1	7	—	—	—	—	—	1	—	—	—	1	1	4	—	—	—	1
420-422	Arteriosclerotic and degenerative heart disease ...	6	4	—	—	—	—	—	—	—	—	1	—	—	1	1	—	4	3
440-443	Hypertension with heart disease...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
444-447	Hypertension without mention of heart ...	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
450-456	Diseases of arteries ...	10	2	—	—	—	—	—	—	—	—	1	—	—	—	4	1	5	1
500-502	Bronchitis ...	2	2	—	—	—	—	—	—	—	—	1	1	—	—	—	—	1	1
510	Hypertrophy of tonsils and adenoids ...	4	2	1	—	3	2	—	—	—	—	—	—	—	—	—	—	—	—
530-535	Diseases of teeth and supporting structures ...	6	3	—	1	1	—	—	—	2	—	1	—	2	1	—	1	—	—
540, 541	Ulcer of stomach and duodenum ...	20	6	—	—	—	—	—	—	—	—	6	—	5	1	4	—	5	5
550-553	Appendicitis ...	9	5	—	1	2	—	1	—	—	—	1	—	—	1	1	—	4	2
560, 561, 570	Intestinal obstruction and hernia	27	20	4	—	—	—	—	—	1	—	1	—	5	1	6	3	11	15
543, 571, 572	Gastritis, duodenitis and colitis, except diarrhoea of the newborn	3	4	1	—	—	—	—	—	—	—	—	2	2	1	1	3	2	3
584, 585	Cholelithiasis and cholecystitis ...	6	8	—	—	—	—	—	—	—	—	—	—	—	—	4	—	21	—
610	Hyperplasia of prostate ...	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
640-689	Deliveries and complications of pregnancy, childbirth and the puerperium ...	—	13	—	—	—	—	—	1	10	—	2	—	—	—	—	—	—	—
750-759	Congenital malformations ...	5	7	3	5	—	1	—	1	—	1	—	3	—	1	1	—	5	15
Rem. 140-795	All other diseases ...	25	33	3	—	2	3	1	1	—	1	2	3	6	6	6	4	—	—
E810-E835	Motor vehicle accidents ...	5	—	—	—	—	—	1	—	1	—	—	—	—	—	2	—	1	—
E900-E904	Accident falls ...	4	17	—	—	—	—	—	—	—	—	—	—	—	—	—	3	4	14
Rem. E800-E962	All other accidents ...	5	3	—	—	2	—	—	—	1	—	1	—	1	—	1	—	—	2



### Therapeutic misadventures

The International Statistical Classification directs that ICD Nos. E950-E959, which deal with therapeutic misadventure and late complications of therapeutic procedures, are not to be used for primary death classification if the condition for which the treatment was given is known. Deaths from therapeutic misadventures can therefore only be analysed by secondary tabulation. Not every complication arising after treatment is a therapeutic misadventure; for example, pulmonary embolism following operation. Cause of death coders are instructed to keep a record of the cause of death in all cases where treatment had an untoward result, but even so, some cases may be missed.

From 1954 onwards special analyses have been made of all deaths finally judged to have been due to therapeutic misadventures, and the cases have been grouped under four headings, so as to bring out the nature of the misadventure, with the following results:

Fatal therapeutic misadventures due to	Number of deaths		
	1954-56 (annual average)	1957-58 (annual average)	1959
(i) adverse reaction to drug or therapy	101	132	136
(ii) mistake in drug administered	4	2	3
(iii) overdose of drug	96	100	127
(iv) accident in technique	30	54	68

Deaths from adverse reactions to drug or therapy have increased from an annual average of 101 during 1954-56 to 136 in 1959, and there has been a similar increase in deaths from an overdose of drug, from 96 to 127. Fatal accidents in technique have also increased from 30 to 68.

So far as deaths connected with drugs are concerned, the increase may be simply a reflection of the increase in usage and of the availability of many new varieties of pharmaceutical products. For example, the following deaths occurred as misadventures associated with chlorpromazine:

	Total
1954-56 (3 years) Largactil 4, Chlorpromazine 1,	5
1957-58 (2 years) „ 4, „ 5,	9
1959 (1 year) „ 4, „ 4, Chlorpromazine hydrochloride 1,	9

Unfortunately there are no basic data on the relative amounts of different drugs being prescribed, nor on the numbers of individuals receiving them.

Table CXVIII (page 194) shows, for adverse reactions to drugs or therapy, both the nature of the reaction and the terminal complication if this is different. Some modern drugs produce blood dyscrasias as side effects, and in 1959 there were 12 deaths attributed to agranulocytosis and 25 to aplastic anaemia as a result of the administration of these drugs. The drugs or therapy with which they were associated were:

### Agranulocytosis

Carbimazole	1	Neomercazole	1
Chloramphenicol	1	Nitrogen mustard	1
Chlorpromazine hydrochloride	1	Radiation	1
Dindevan	1	Sulphonamides	1
Largactil	1	Thiotepa	1
Myocrisin	1	“Anti-depressive drug”	1

### Aplastic anaemia

Butazolidin	2	Novalgin	1
Chloramphenicol	3	Para-aminosalicylic acid	1
Chloromycetin	2	Pencillin and chloromycetin	1
Cytamen	1	Phenylbutazone and plaquenil	1
Largactil	1	Radiation	4
Methylthiouracil	1	Streptomycin, P.A.S. and I.N.A.H.	1
Myleran	1	Transfusions	1
Myleran and blood transfusion	1	Tridione	1
Mysoline	1	Antibiotic (not specified)	1

Jaundice, hepatitis, liver failure or atrophy were connected with the administration of chlorpromazine (4 deaths), Largactil (1 death), Marsilid (1 death) and transfusions (4 deaths).

Table CXIX (page 197) shows that there were 127 deaths due to overdoses of drugs taken therapeutically, 98 of these (77 per cent) being in the barbiturate group.

Table CXXI (page 198) shows the nature of fatal therapeutic misadventures due to accidents in technique. Whereas in 1957-58 there were 6 deaths due to packs or swabs being left in operation sites, there were no deaths assigned to this cause in 1959.

In all these tables the agents are as described by the coroner and no attempt has been made to amalgamate synonymous terms.

Table CXVIII. Fatal therapeutic misadventures due to adverse reaction to drug or therapy, 1959, England and Wales

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Aminophylline ... ..	1	Acute heart failure	
Anticoagulant ... ..	7	Alimentary haemorrhage	Anaemia
	2	Cerebral haemorrhage	
	1	Haematemesis	
	2	Haemorrhage	Hypostatic pneumonia (1 case)
	1	Retroperitoneal haematoma	Intestinal obstruction (1 case)
Barium enema ... ..	1	Vagal inhibition	
Butazolidin ... ..	2	Aplastic anaemia	Cardiac failure (1 case)
Carbimazole ... ..	1	Agranulocytosis	
Chloramphenicol ... ..	4	Agranulocytosis	Bronchopneumonia
	1	Aplastic anaemia	Bronchopneumonia (1 case)
	3		Cerebral haemorrhage (1 case)
Chloromycetin ... ..	2	Aplastic anaemia	Acute pulmonary oedema (1 case)
Chlorpromazine ... ..	4	Hepatitis	Coronary atheroma
	1	Jaundice and liver failure	Congestion of the lungs
	1	Subacute yellow atrophy of liver	Hepatic failure
	1	Toxic hepatitis	Bronchopneumonia
Chlorpromazine hydrochloride ... ..	1	Agranulocytosis	
Cortisone ... ..	7	Adrenal failure	Bronchopneumonia
	1	Hypo-adreno-corticism	
	1	Ileo-sigmoid anastomosis	Uraemia
	1	Multiple erosions	Carcinomatosis
	1	Perforated gastric ulcer leaking slowly	
	1	Perforated ulcer of small bowel	Carcinoma of breast
	1	Perforation of small bowel	
Cytamen ... ..	1	Aplastic anaemia	
Dindevan ... ..	3	Agranulocytosis	
	1	Cerebellar haemorrhage	
	1	Haemorrhagic nephritis	Uraemia
Diodone ... ..	1	Hypotension	
Electro-convulsive therapy ... ..	8	Acute cardiac failure	
	1	Acute heart failure	
	2	Chronic specific aortitis	
	1	Fracture of pubic bone	Pulmonary embolism
	1	Multiple emboli, pulmonary and mesenteric	
	1	Prolonged cerebral anoxia	
	1	Ruptured atrophic urinary bladder	Shock
Gold ... ..	2	Meningitis	
	1	Toxic nephritis	Renal failure
Insulin... ..	8	Coma	Bronchopneumonia
	1	Hypoglycaemia	Acute pulmonary oedema (1 case)
	4		Asphyxia (1 case)
			Cellular brain damage (1 case)
			Myocardial degeneration (1 case)
	2	Hypoglycaemic coma	Myocardial infarction (1 case)
	1	Sudden cardiac arrest	
Largactil ... ..	4	Agranulocytosis	Bronchopneumonia
	1	Aplastic anaemia	Cerebral tumour
	1	Hepatic and renal necrosis	Toxic jaundice
	1	Jaundice	Bronchopneumonia
Marsilid ... ..	1	Acute hepatic necrosis	

Table CXVIII—continued

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Mecamylamine ... ..	1	Paralytic ileus	Asphyxia
Mersalyl ... ..	1	Renal failure	Chronic bronchitis and emphysema
Methylthiouracil ... ..	1	Aplastic anaemia	
Myleran ... ..	1	Aplastic anaemia	
Myleran and blood transfusion ... ..	1	Aplastic anaemia	Leukaemia
Myocrisin ... ..	1	Agranulocytosis	
Mysoline ... ..	1	Aplastic anaemia	
Neo-Mercazole ... ..	1	Agranulocytosis	
Nitrogen mustard ... ..	1	Agranulocytosis	Respiratory infection
Nitrous oxide and oxygen ... ..	1	Fallot's tetralogy and cerebral anoxia	Acute cardiac failure
Novalgin ... ..	1	Aplastic anaemia	Acute myocardial failure
P.32 ... ..	1	Anaemia	Pneumonia
Para-aminosalicylic acid ... ..	1	Aplastic anaemia	
Penicillin ... ..	2	Anaphylaxis	
	1	Exfoliative dermatitis	Bronchopneumonia
Penicillin and chloromycetin ... ..	1	Aplastic anaemia	
Pentothal, gas and oxygen ... ..	1	Prolonged cerebral anoxia during anaesthetic for mobilization of stapes bone	
Phenindione ... ..	2	Acute ulcerative enteritis	Intestinal haemorrhage
	1	Intra-pulmonary haemorrhage	Lung abscess
Phenylbutazone, Plaquenil ... ..	1	Aplastic anaemia	
Phenylindanedione ... ..	1	Cerebral haemorrhage	
Prednisolone ... ..	2	Haematemesis	
	1	Uraemia	
Procaine ... ..	1	Hypersensitivity	
Radiation ... ..	31	Agranulocytosis	
	4	Aplastic anaemia	
	1	Bladder necrosis	Pyelonephritis
	1	Fibrosis of lung	Carcinomatosis
	1	Irradiation dermatitis and lupus	Carcinoma of bronchus
	1	Irradiation fibrosis	Uraemia
	1	Irradiation nephritis	Renal failure
	1	Irradiation pulmonary fibrosis	Lymphosarcoma
	1	Multiple faecal fistulae and urinary fistulae	
	1	Necrosis of bladder	Haemorrhage from bladder fistula
	1	Paraplegia	
	1	Post irradiation gastric ulcer	Haematemesis
	1	Post radiation fibrosis of lung	Lobar pneumonia
	1	Post radiation necrosis	Carcinoma of neck
	1	Post radiation pneumonitis	
	3	Pulmonary fibrosis	Bronchopneumonia (1 case)
			Massive haemoptysis (1 case)
			Right ventricular failure (1 case)
	1	Radiation nephritis	Uraemia
	1	Radiation pneumonitis	Bronchopneumonia
	1	Radiation reaction	Laryngeal obstruction
	1	Radionecrosis	Acute haemorrhage
	1	Radionecrosis of colon	Staphylococcal pneumonia
	2	Radionecrosis of neck	Arterial bleeding shock (1 case)
			Bronchopneumonia (1 case)
	1	Radionecrotic ulcer of vulva	Senile inanition and cachexia
	1	Radium necrosis of bladder	Renal failure
	1	X-ray necrosis	

Table CXVIII—continued

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Radio active gold and X-ray	1	Bilateral pulmonary fibrosis and pleural effusion	Respiratory failure
Rastinon ... ..	1	Allergic enteritis	Bronchopneumonia
Soneryl ... ..	1	Renal failure	
Steroid therapy ... ..	4		
	1	Adrenal atrophy	Haematemesis
	1	Atrophy of the bladder	Shock due to rupture of bladder
	1	Osteoporosis	Bronchopneumonia
	1	Sodium retention and oedema	Congestive cardiac failure
Streptomycin ... ..	1	Sensitivity	Subdural haemorrhage
Streptomycin, P.A.S. and I.N.A.H. ... ..	1	Aplastic anaemia	
Sulphonamides ... ..	1	Agranulocytosis	Septicaemia
Thiotepa ... ..	1	Agranulocytosis	
Transfusions ... ..	6		
	1	Aplastic anaemia	
	1	Cardiac failure	
	1	Fulminant hepatitis	
	1	Homologous serum hepatitis	Acute hepatic necrosis
	1	Homologous serum jaundice	Hepatic necrosis
	1	Post-transfusional hepatitis	Hepatic coma
Tridione ... ..	1	Aplastic anaemia	
Urolucosil ... ..	1	Anaphylactoid purpura	Intracranial haemorrhage and oedema
Xylocaine ... ..	1	Intolerance	Hypostatic pneumonia
Drug therapy ... ..	3		
	2		
Antibiotic ... ..	1	Acute enteritis	Toxaemia
	1	Aplastic anaemia	Bronchopneumonia
Anti-depressive ... ..	1	Agranulocytosis	Bronchopneumonia
<b>Total ... ..</b>	<b>136</b>		

Table CXIX. Fatal therapeutic misadventures due to overdose of drug, 1959, England and Wales

Drug or combination of drugs	Cases			Drug or combination of drugs	Cases		
	Medically administered	Self-administered	Administration not stated		Medically administered	Self-administered	Administration not stated
Adrenaline	—	1	—	Insulin	1	1	2
Amphetamine	1	—	—	Luminal	—	1	—
Amylobarbitone	—	—	1	Nembutal	—	3	4
Amylobarbitone and aspirin	—	—	1	Pacatal, Amytal and Sonalgin	—	—	1
Amytal	—	1	—	Persomnia	—	—	1
Aspirin	—	4	3	Phenobarbitone	—	4	5
Aspirin, codeine and barbiturate	—	—	1	Physeptone	—	—	1
Barbital	—	—	2	Salicylate	—	—	1
Barbitone	—	1	5	Seconal	—	2	1
Barbiturate	—	21	16	Sodium Amytal	—	5	6
Barbiturate and aspirin	—	1	—	Soneryl	—	1	1
Barbiturate and paraldehyde	—	1	—	Tuinal	—	2	5
Barbituric acid	—	—	3	Not stated	—	—	2
Butobarbitone	—	—	1				
Carbrital	—	1	—				
Carbromal and pentobarbitone	—	1	—				
Chloral hydrate	—	2	2				
Chlorodyne	—	—	1				
Digoxin	—	—	1				
Doriden	—	—	2				
Equanil	—	2	1				
				<b>Total</b>	<b>2</b>	<b>55</b>	<b>70</b>

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**Table CXX. Fatal therapeutic misadventures due to mistake in drug administration, 1959, England and Wales**

Therapeutic misadventure associated with	Nature of misadventure
	<i>Medically administered (3 cases)</i>
Paraldehyde ... ..	Excessive dose, misunderstanding as to drug to be injected
Paraldehyde ... ..	Overdose, intravenous injection given in error
Quinidine sulphate ...	Inadvertently injected instead of Ethiodan

**Table CXXI. Fatal therapeutic misadventures due to accident in technique, 1959, England and Wales**

Therapeutic misadventure associated with	Nature of misadventure
<b>Air embolism</b> 11 cases	Air embolism, aortotomy for the repair of an aneurysmal rupture of the aortic sinus. Air embolism during blood transfusion, gastrectomy for carcinoma of stomach. Air embolism produced by blood transfusion following left lower lobectomy for bronchiectasis. Air embolism, repair of interatrial septal defect. Air embolism due to cutting of a vein within which pressure was less than that of the atmosphere, craniotomy for right hemangioblastoma of cerebellum. Peripheral circulatory failure, mid-brain infarction, air embolism, air entered the veins during operation. Air embolism following transfusion for umbilical haemorrhage. Air embolism following operation for varicose veins. Air embolism following operation for excision of malignant glands in the neck. Air embolism when blood transfusion was being given during an operation for a tumour of the brain. Air embolism following operation for malignant cerebellar glioma.
<b>Anaesthesia</b> 2 cases	Respiratory failure due to scoline poisoning during anaesthetic for appendectomy. Cerebral necrosis and hypostatic pneumonia, cerebral anoxia sustained as a consequence of the deprivation of oxygen whilst undergoing thyroidectomy.
<b>Apparatus</b> 1 case	Asphyxia due to poliomyelitis accelerated by the failure of a mechanical respiration apparatus.
<b>Infection</b> 13 cases	Uraemia, septicaemia, wound infection, colostomy for imperforate anus. Meningitis, post-operative infection, craniotomy for cerebral aneurysm. Senility and general debility, poor resistance, fractured neck of right femur, sepsis in operation wound for femur might be due to gross infection in the ward.

**Table CXXI—continued**

Therapeutic misadventure associated with	Nature of misadventure
<b>Infection—(contd.)</b>	Hypostatic pneumonia, recumbency, infection of operation wound, fractured neck of femur. Pneumonia, post-operative toxæmia, toxins from the wound, amputation above knee. Staphylococcal pyaemia, infected operation wound. Toxic myocarditis, lung and wound sepsis associated with coronary atheroma, laparotomy acute appendicitis. Septicaemia, subdeltoid abscess following injection of hydrocortisone in shoulder for rheumatism. Bronchopneumonia, tetanus following an operation for removal of duodenal ulcer. Diffuse bronchopneumonia from infection from septicaemic abscess right shoulder joint following hospital injection of hydrocortisone for peri-arthritis. Toxaemia due to toxic epidermal necrolysis caused by an unidentified part of treatment for conjunctivitis. Staphylococcal septicaemia with lung abscess, staphylococcal stitch abscess in a wound. Acute pulmonary oedema, bilateral bronchopneumonia and surgical wound sepsis due to insertion of acrylin femoral head for a fracture of the neck of left femur.
<b>Instruments</b> 25 cases	
Adrenalectomy ...	Circulatory failure due to haemorrhage from tearing of the inferior vena cava during adrenalectomy.
Appendectomy ...	Peritonitis, bowel damage during operation and peritonitis followed.
Biopsy ... ..	Lateral haemorrhage due to torn liver due to biopsy for amyloid disease. Peripheral circulatory failure, peritonitis, perforation small bowel during biopsy, papilloma pelvic colon. Intraperitoneal haemorrhage due to biopsy puncture of the liver for the investigation of anaemia.
Cholecystectomy ...	Liver failure, cholecystitis, portal vein inadvertently excised during cholecystectomy.
Cystoscopy ... ..	Renal failure due to acute renal tubular necrosis due to perforating ulcer of the bladder due to mucosal abrasions following cystoscopy.
Gastrectomy ... ..	Acute fulminating haemorrhagic pancreatitis, damage to pancreas during partial gastrectomy for pyloric ulcer. Bronchopneumonia due to subacute intestinal obstruction and local peritonitis due to peritoneum being perforated by tube being inserted after gastrectomy.
Nephrectomy ... ..	Ruptured renal vein and artery during nephrectomy for haematuria.
Oesophagoscopy ...	Empyema due to perforation of the oesophagus during oesophagoscopy for carcinoma of oesophagus.
Prostatectomy ...	Generalised peritonitis, ruptured urethra, instrumentation for urinary retention whilst under anaesthetic for operation for peritonitis.
Sigmoidoscopy ...	Pulmonary embolus (post-operative), coronary atheroma, operation, peritonitis due to perforation of rectum during sigmoidoscopy.
Thoracotomy ... ..	Haemorrhage and shock due to operative tear at heart due to thoracotomy for obliterative pericarditis.
Miscellaneous ...	Haemorrhage, erosion of superior vena cava by tracheotomy tube, staphylococcal septicaemia. Peritonitis, perforated small bowel, Souttar's tube introduced into oesophagus for carcinoma.

Table CXXI—continued

Therapeutic misadventure associated with	Nature of misadventure
<b>Instruments—(contd.) Miscellaneous —(contd.)</b>	Internal haemorrhage following instrumental liver injury during operation for bleeding gastric ulcer. Bladder inadvertently perforated, operation for carcinoma of prostate. Mediastinitis and peritonitis due to perforation of oesophagus, perforation by tube used surgically. Peritonitis, leak from duodenal tear, perforation got torn at operation. Tracheal haemorrhage due to erosion of the innominate artery by an indwelling tracheal tube. Shock and haemorrhage, puncture of aorta during operation, carcinoma right upper lobe. Haemorrhage due to erosion of an artery by a tracheotomy tube necessarily applied for relief of respiratory failure, encephalitis lethargica. General peritonitis due to perforation of acute gastric ulcer, probably caused by bruising of the stomach wall by a bougie during dilatation of a chronic traumatic oesophageal stricture. Toxaemia due to chronic bronchitis accelerated by a gunshot wound of the chest received during first world war and three pieces of rubber drainage tubing were left in an operation site in the chest more than a year before the death.
<b>Needling</b> 3 cases	Pericardial haemorrhage following needle exploration for pericardial effusion. Haemorrhage following needle biopsy of the liver, needle biopsy for confirmation of Hodgkin's disease. Paracentesis of pericardium, the wall of the heart was punctured.
<b>Post-operative repair</b> 6 cases	Haemorrhage, a ligature partly slipping off a pulmonary artery branch. Cardiac arrest following a severe haemorrhage from a large branch of the pulmonary artery due to inadvertent slipping of a ligature following an operation for removal of cancer of the lung and chest wall. Myocardial degeneration due to coronary atheroma accelerated by haemorrhage from cystic artery following cholecystectomy, ligature slipped after operation for removal of bladder. Haemorrhage due to slipped ligature following oophorectomy for carcinoma. Intra-abdominal haemorrhage, slipped ligature, operation for removal of carcinoma of stomach. Retroperitoneal haemorrhage from suture in left ovarian vein after operation for colectomy of carcinoma of colon.
<b>Transfusions with incompatible blood</b> 4 cases	Pituitary infarction and renal failure due to a postpartum haemorrhage due to childbirth, accelerated by incompatible blood transfusion. Peripheral vascular collapse, necrotising enteritis, total gastrectomy for cancer of stomach, incompatible blood transfusion. Renal failure resultant upon an incompatible blood transfusion, operation for diaphragmatic hernia. Coronary occlusion due to atheroma, renal tubular necrosis due to mismatched blood transfusion.

Table CXXI—continued

Therapeutic misadventure associated with	Nature of misadventure
<b>Other misadventures</b> 3 cases	Perforated oesophagus following operation for carcinoma of oesophagus. Haemopericardium due to perforation of the right ventricle caused by penetration of polythene catheter inserted into the inferior vena cava to relieve biliary fistula. Cardiac arrest following operative perforation of origin of right pulmonary artery, with uncontrollable haemorrhage.
<b>Total</b> 68 cases	

## Deaths from bites and stings of venomous animals and insects

Four deaths from this cause (ICD No. E927) were registered in 1959. Deaths from this cause since 1949 are shown in Table CXXII by sex, according to the animal or insect involved.

Table CXXII. Deaths from bites and stings of venomous animals and insects, 1949 to 1959, England and Wales

Year	Animal or insect					
	Bee		Wasp		Not stated	
	M	F	M	F	M	F
1949	1	1	1	7	—	—
1950	2	—	—	—	—	—
1951	—	—	1	3	—	—
1952	1	1	1	2	—	—
1953	1	2	1	1	—	1
1954	—	—	1	2	—	—
1955	—	—	3	1	—	1
1956	1	2	—	1	—	—
1957	1	—	1	3	1	—
1958	1	—	3	3	—	2
1959	1	1	2	—	—	—
<b>Total</b>	<b>9</b>	<b>7</b>	<b>14</b>	<b>23</b>	<b>1</b>	<b>4</b>

## Deaths in institutions

In Table CXXIII (page 203) deaths registered in England and Wales in 1959 are analysed by cause of death and the type of place where death occurred. Of the total of 527,651 deaths registered, 274,352 (52 per cent) took place in institutions of one kind or another. The proportionate distribution per 1,000 deaths in 1959 compared with five years previously was as follows:

					1959	1954
Psychiatric hospitals	{	N.H.S.	...	...	30	26
		non-N.H.S.	...	...	1	1
Other hospitals and institutions for the sick	{	N.H.S.	...	...	432	379
		non-N.H.S.	...	...	27	27
Other institutions	...	...	...	...	31	27
At deceased's own home	...	...	...	...	431	495
Other private house, etc.	...	...	...	...	48	45
Total					1,000	1,000

The percentage of institutional deaths has increased over the five years from 46 to 52.

There were 98,393 deaths assigned to neoplasms in 1959, of which 52,531 (53 per cent) occurred in either general or psychiatric hospitals; 1,229 (1 per cent) in other institutions; 41,990 (43 per cent) in the deceased person's own home and 2,643 (3 per cent) elsewhere.

Of the 7,862 deaths assigned to influenza, 4,330 (55 per cent) took place in the deceased person's home, compared with 2,157 (27 per cent) in hospitals and other institutions for the care of the sick other than psychiatric ones.

Arteriosclerotic and degenerative heart disease was the principal cause of death in psychiatric hospitals, followed by pneumonia and by vascular lesions affecting the central nervous system. These three causes accounted respectively for 36, 13 and 10 per cent of the deaths in these hospitals.

Table CXXIII. Deaths by cause and sex according to type of institution, etc., in which they occurred, 1959, England and Wales

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Cause of death	ICD No.	Total deaths		Psychiatric hospitals				Other hospitals and institutions for the care of the sick				Other institutions		At deceased person's own home		In other private houses and other places	
				N.H.S.		Other than N.H.S.		N.H.S.		Other than N.H.S.		M	F	M	F	M	F
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All causes		269,878	257,773	6,502	9,329	138	278	121,352	106,478	4,528	9,528	6,587	9,632	116,395	111,359	14,376	11,169
Infective and parasitic diseases ... ..	001-138	4,142	1,991	195	97	—	2	2,498	1,238	41	20	43	25	1,294	546	71	63
Tuberculosis of respiratory system ... ..	001-008	2,620	854	100	39	—	1	1,552	528	16	4	22	3	892	257	38	22
Tuberculosis, other forms ... ..	010-019	190	190	9	7	—	1	144	136	4	4	4	1	28	37	1	4
Syphilis and its sequelae ... ..	020-029	627	331	58	24	—	—	309	138	6	3	12	10	219	134	23	22
Gonococcal infection and other venereal diseases ... ..	030-039	24	—	—	—	—	—	16	—	—	—	—	—	8	—	—	—
Infectious diseases commonly arising in the intestinal tract ... ..	040-049	40	42	6	—	—	—	27	34	1	1	—	—	5	6	1	1
Other bacterial diseases ... ..	050-064	180	134	1	5	—	—	142	102	1	1	—	2	34	23	2	1
Spirochaetal diseases, except syphilis... ..	070-074	11	2	—	—	—	—	9	—	1	1	—	—	1	1	—	—
Diseases attributable to viruses ... ..	080-096	381	380	20	20	—	—	256	266	9	5	5	9	85	72	6	8
Typhus and other rickettsial diseases ... ..	100-108	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
Malaria ... ..	110-117	—	2	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Other infective and parasitic diseases ... ..	120-138	68	56	1	2	—	—	42	33	3	1	—	—	22	16	—	4
Neoplasms ... ..	140-239	52,324	46,069	504	618	6	17	26,321	21,544	1,340	2,181	519	710	22,929	19,061	705	1,938
Malignant neoplasm of buccal cavity and pharynx ... ..	140-148	1,249	613	18	5	1	1	548	271	37	28	37	6	591	280	17	22
Malignant neoplasm of digestive organs and peritoneum ... ..	150-159	19,160	18,585	204	222	2	5	9,071	8,027	488	872	221	339	8,910	8,232	264	888
Malignant neoplasm of respiratory system ... ..	160-165	19,026	3,202	148	49	1	4	9,288	1,708	437	141	124	38	8,756	1,143	272	119
Malignant neoplasm of breast and genito-urinary organs ... ..	170-181	6,704	17,593	55	234	—	5	3,445	7,700	221	913	102	276	2,800	7,746	81	719
Malignant neoplasm of other and unspecified sites ... ..	190-199	2,853	2,952	51	62	1	1	1,671	1,652	92	144	23	26	983	951	32	116
Neoplasms of lymphatic and haematopoietic tissues ... ..	200-205	2,791	2,389	15	23	1	1	1,911	1,656	55	65	7	16	772	568	30	60
Benign neoplasm ... ..	210-229	316	524	9	18	—	—	216	383	9	15	3	5	71	95	8	8
Neoplasm of unspecified nature ... ..	230-239	225	211	4	5	—	—	171	147	1	3	2	4	46	46	1	6
Allergic, endocrine system, metabolic, and nutritional diseases ... ..	240-289	2,032	3,824	40	90	1	1	1,142	2,170	16	66	24	59	765	1,328	44	110
Allergic disorders ... ..	240-245	539	689	7	9	1	—	200	262	2	12	2	—	313	374	14	32
Diseases of thyroid gland ... ..	250-254	114	621	4	14	—	—	59	339	1	3	—	8	46	228	4	29
Diabetes mellitus ... ..	260	1,100	2,093	25	52	—	—	704	1,318	10	50	18	48	326	580	17	45
Diseases of other endocrine glands ... ..	270-277	97	141	2	8	—	—	67	88	—	—	4	1	21	43	3	1
Avitaminoses, and other metabolic diseases... ..	280-289	182	280	2	7	—	1	112	163	3	1	—	2	59	103	6	3
Diseases of the blood and blood-forming organs	290-299	756	1,313	25	29	1	1	465	758	9	20	9	43	241	427	6	35



Table CXXIII—continued

Cause of death	ICD No.	Total deaths		Psychiatric hospitals				Other hospitals and institutions for the care of the sick				Other institutions		At deceased person's own home		In other private houses and other places	
		M	F	N.H.S.		Other than N.H.S.		N.H.S.		Other than N.H.S.		M	F	M	F	M	F
				M	F	M	F	M	F	M	F						
<b>Mental, psychoneurotic, and personality disorders</b>	<b>300-326</b>	<b>364</b>	<b>644</b>	<b>118</b>	<b>174</b>	<b>4</b>	<b>9</b>	<b>156</b>	<b>296</b>	<b>4</b>	<b>21</b>	<b>9</b>	<b>28</b>	<b>70</b>	<b>109</b>	<b>3</b>	<b>7</b>
Psychoses	300-309	254	519	102	147	2	8	109	253	1	18	8	22	32	67	—	4
Psychoneurotic disorders	310-318	23	54	6	9	—	—	11	20	1	—	1	6	4	18	—	1
Disorders of character, behaviour, and intelligence	320-326	87	71	10	18	2	1	36	23	2	3	—	—	34	24	3	2
<b>Diseases of the nervous system and sense organs</b>	<b>330-398</b>	<b>33,593</b>	<b>47,184</b>	<b>766</b>	<b>1,067</b>	<b>28</b>	<b>56</b>	<b>15,990</b>	<b>20,050</b>	<b>801</b>	<b>2,265</b>	<b>1,401</b>	<b>2,175</b>	<b>13,973</b>	<b>19,971</b>	<b>634</b>	<b>1,600</b>
Vascular lesions affecting central nervous system	330-334	30,897	44,253	599	899	19	47	14,506	18,448	736	2,101	1,293	2,052	13,168	19,158	576	1,548
Inflammatory diseases of central nervous system	340-345	685	795	22	21	—	1	481	530	13	49	24	27	137	156	8	11
Other diseases of central nervous system	350-357	1,809	2,005	143	146	8	7	848	968	50	115	81	96	632	633	47	40
Diseases of nerves and peripheral ganglia	360-369	36	35	—	—	—	—	28	27	—	—	—	—	8	8	—	—
Inflammatory diseases of eye	370-379	2	3	—	—	—	—	2	2	—	—	—	—	—	1	—	—
Other diseases and conditions of eye	380-389	26	36	—	—	—	—	21	32	1	—	2	—	2	3	—	1
Diseases of ear and mastoid process	390-398	138	57	2	1	1	1	104	43	1	—	1	—	26	12	3	—
<b>Diseases of the circulatory system</b>	<b>400-468</b>	<b>96,306</b>	<b>95,526</b>	<b>2,944</b>	<b>4,545</b>	<b>56</b>	<b>114</b>	<b>30,290</b>	<b>28,117</b>	<b>1,303</b>	<b>3,435</b>	<b>2,808</b>	<b>4,452</b>	<b>51,438</b>	<b>50,041</b>	<b>7,467</b>	<b>4,822</b>
Rheumatic fever	400-402	63	63	1	—	—	—	41	37	—	1	—	2	15	20	6	3
Chronic rheumatic heart disease	410-416	2,482	4,589	34	98	1	3	1,161	2,169	23	72	30	100	1,108	1,976	125	171
Arteriosclerotic and degenerative heart disease	420-422	72,700	64,224	2,284	3,386	43	90	19,685	15,873	955	2,447	2,143	3,242	41,029	35,692	6,561	3,494
Other diseases of heart	430-434	5,644	7,120	107	143	1	6	2,665	2,850	75	201	171	334	2,435	3,271	190	315
Hypertensive heart disease	440-443	4,656	6,719	221	368	3	—	1,603	2,066	71	254	134	269	2,443	3,433	181	329
Other hypertensive disease	444-447	3,269	3,555	117	164	1	1	1,443	1,230	57	109	68	106	1,430	1,785	153	160
Diseases of arteries	450-456	6,208	7,368	142	287	7	10	2,768	2,752	115	316	245	369	2,717	3,355	214	279
Diseases of veins and other diseases of circulatory system	460-468	1,284	1,888	38	99	—	4	924	1,140	7	35	17	30	261	509	37	71
<b>Diseases of the respiratory system</b>	<b>470-527</b>	<b>40,756</b>	<b>27,796</b>	<b>1,295</b>	<b>1,855</b>	<b>22</b>	<b>54</b>	<b>19,004</b>	<b>11,869</b>	<b>499</b>	<b>722</b>	<b>1,309</b>	<b>1,321</b>	<b>17,824</b>	<b>11,148</b>	<b>803</b>	<b>827</b>
Acute upper respiratory infections	470-475	57	62	—	1	1	—	17	23	2	—	—	1	32	33	5	4
Influenza	480-483	3,898	3,964	162	261	3	10	1,048	945	57	107	338	365	2,193	2,137	97	139
Pneumonia	490-493	13,203	13,387	754	1,306	16	37	8,283	7,331	196	406	366	558	3,360	3,474	228	275
Bronchitis	500-502	20,193	8,858	301	208	2	7	8,061	2,866	203	166	552	357	10,670	4,883	404	371
Other diseases of respiratory system	510-527	3,405	1,525	78	79	—	—	1,595	704	41	43	53	40	1,569	621	69	38
<b>Diseases of the digestive system</b>	<b>530-587</b>	<b>7,748</b>	<b>7,159</b>	<b>128</b>	<b>142</b>	<b>5</b>	<b>4</b>	<b>6,300</b>	<b>5,402</b>	<b>130</b>	<b>180</b>	<b>53</b>	<b>73</b>	<b>1,056</b>	<b>1,237</b>	<b>76</b>	<b>121</b>
Diseases of buccal cavity and oesophagus	530-539	97	150	5	17	—	—	73	102	1	6	2	2	15	19	1	4
Diseases of the stomach and duodenum	540-545	3,232	1,576	40	21	—	1	2,637	1,168	44	27	21	22	455	308	35	29
Appendicitis	550-553	430	271	5	1	—	—	395	241	7	6	2	1	18	19	3	3
Hernia of abdominal cavity	560, 561	705	839	9	14	—	—	581	655	13	25	7	5	91	122	4	18
Other diseases of intestines and peritoneum	570-578	1,814	2,276	49	53	2	3	1,446	1,705	30	65	10	29	257	391	20	30
Diseases of liver, gallbladder and pancreas	580-587	1,470	2,047	20	36	3	—	1,168	1,531	35	51	11	14	220	378	13	37
<b>Diseases of the genito-urinary system</b>	<b>590-637</b>	<b>6,888</b>	<b>3,676</b>	<b>154</b>	<b>110</b>	<b>5</b>	<b>2</b>	<b>5,005</b>	<b>2,365</b>	<b>147</b>	<b>104</b>	<b>96</b>	<b>53</b>	<b>1,412</b>	<b>957</b>	<b>69</b>	<b>85</b>
Nephritis and nephrosis	590-594	1,923	1,762	47	45	2	1	1,196	926	28	52	16	28	601	663	33	47
Other diseases of urinary system	600-609	1,367	1,722	55	64	1	1	1,015	1,280	29	42	26	23	227	279	14	33
Diseases of male genital organs	610-617	3,597	—	52	—	2	—	2,793	—	90	—	54	—	584	—	22	—
Diseases of breast, ovary, Fallopian tube and parametrium	620-626	1	44	—	—	—	—	1	40	—	—	—	1	—	—	—	2
Diseases of uterus and other female genital organs	630-637	—	148	—	1	—	—	—	119	—	10	—	1	—	14	—	3
<b>Deliveries and complications of pregnancy, childbirth, and the puerperium</b>	<b>640-689</b>	<b>290</b>	<b>—</b>	<b>—</b>	<b>5</b>	<b>—</b>	<b>—</b>	<b>242</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>33</b>	<b>—</b>	<b>9</b>	<b>—</b>
Complications of pregnancy	640-649	96	—	—	1	—	—	84	—	—	—	—	—	8	—	3	—
Abortion	650-652	47	—	—	—	—	—	36	—	—	—	—	—	5	—	6	—
Delivery without mention of complication	660	4	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—
Delivery with specified complication	670-678	85	—	—	—	—	—	75	—	—	—	—	—	9	—	—	—
Complications of the puerperium	680-689	58	—	—	4	—	—	43	—	—	—	—	—	11	—	—	—
<b>Diseases of the skin and cellular tissue</b>	<b>690-716</b>	<b>173</b>	<b>282</b>	<b>6</b>	<b>11</b>	<b>—</b>	<b>—</b>	<b>129</b>	<b>189</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>8</b>	<b>29</b>	<b>64</b>	<b>2</b>	<b>5</b>
Infections of skin and subcutaneous tissue	690-698	83	90	3	9	—	—	66	65	1	5	3	—	8	14	2	2
Other diseases of skin and subcutaneous tissue	700-716	90	192	3	2	—	—	63	124	2	5	1	8	21	50	—	3
<b>Diseases of the bones and organs of movement</b>	<b>720-749</b>	<b>613</b>	<b>1,331</b>	<b>4</b>	<b>15</b>	<b>—</b>	<b>2</b>	<b>343</b>	<b>662</b>	<b>13</b>	<b>78</b>	<b>15</b>	<b>66</b>	<b>230</b>	<b>496</b>	<b>8</b>	<b>12</b>
Arthritis and rheumatism, except rheumatic fever	720-727	355	1,027	2	6	—	1	182	462	7	68	11	57	147	423	6	10
Osteomyelitis and other diseases of bone and joint	730-738	143	206	2	6	—	1	98	135	1	7	2	5	38	51	2	1
Other diseases of musculoskeletal system	740-749	115	98	—	3	—	—	63	65	5	3	2	4	45	22	—	1
<b>Congenital malformations</b>	<b>750-759</b>	<b>2,503</b>	<b>2,408</b>	<b>36</b>	<b>26</b>	<b>8</b>	<b>2</b>	<b>1,949</b>	<b>1,904</b>	<b>24</b>	<b>36</b>	<b>10</b>	<b>14</b>	<b>419</b>	<b>384</b>	<b>57</b>	<b>42</b>
<b>Certain diseases of early infancy</b>	<b>760-776</b>	<b>5,506</b>	<b>3,807</b>	<b>22</b>	<b>13</b>	<b>—</b>	<b>—</b>	<b>5,025</b>	<b>3,459</b>	<b>75</b>	<b>45</b>	<b>3</b>	<b>4</b>	<b>336</b>	<b>250</b>	<b>45</b>	<b>36</b>
Birth injuries, asphyxia, and infections of the newborn	760-769	3,404	2,140	12	7	—	—	3,068	1,898	47	23	1	3	246	183	30	26
Other diseases peculiar to early infancy	770-776	2,102	1,667	10	6	—	—	1,957	1,561	28	22	2	1	90	67	15	10
<b>Symptoms, senility, and ill-defined conditions</b>	<b>780-795</b>	<b>2,718</b>	<b>5,094</b>	<b>103</b>	<b>247</b>	<b>—</b>	<b>8</b>	<b>802</b>	<b>1,247</b>	<b>53</b>	<b>243</b>	<b>225</b>	<b>527</b>	<b>1,443</b>	<b>2,667</b>	<b>92</b>	<b>155</b>
Symptoms referable to systems or organs	780-789	69	65	—	—	—	—	43	29	1	—	1	4	19	30	5	2
Senility and ill-defined diseases	790-795	2,649	5,029	103	247	—	8	759	1,218	52	243	224	523	1,424	2,637	87	153
<b>Accidents, poisonings, and violence (external cause)</b>	<b>E800-E999</b>	<b>13,456</b>	<b>9,379</b>	<b>162</b>	<b>285</b>	<b>2</b>	<b>6</b>	<b>5,933</b>	<b>4,966</b>	<b>70</b>	<b>106</b>	<b>59</b>	<b>74</b>	<b>2,936</b>	<b>2,640</b>	<b>4,294</b>	<b>1,302</b>
Railway accidents	E800-E802	250	30	—	—	—	—	63	5	1	—	—	—	2	—	184	25
Motor vehicle traffic accidents	E810-E825	4,345	1,607	15	3	1	1	2,796	1,110	19	7	2	2	21	14	1,491	470
Motor vehicle non-traffic accidents	E830-E835	69	5	—	—	—	—	37	2	1	—	—	—	1	1	30	2
Other road vehicle accidents	E840-E845	112	54	2	—	—	—	86	47	1	—	—	—	7	2	16	5
Water transport accidents	E850-E858	147	5	—	—	—	—	36	—	—	1	—	—	3	—	108	4
Aircraft accidents	E860-E866	75	3	—	—	—	—	2	—								

### Medical certification of cause of death

#### Proportion of bodies seen after death

Table CXXIV shows for 1959 and five earlier years the percentage of deaths which were investigated by a coroner or where the body was seen after death by the certifying practitioner, and also the percentage where the certifying medical practitioner did not see the body and no coroner's enquiry took place. The figures for 1953, 1954 and 1959 are based on a sample of one medical certificate in seven.

Both the proportion of bodies seen by certifying practitioners and the proportion of deaths investigated by the coroner continue to increase. The proportion seen after death by a certifying practitioner may be understated, because the statement by a certifying practitioner is made when he signs the medical certificate of cause of death and there may well be occasions when he sees the body subsequently.

**Table CXXIV. Medical certification of cause of death: Proportion of bodies seen after death, 1928 to 1959, England and Wales**

	1928	1933	1947	1953*	1954*	1959*
Seen after death	51.0	53.7	60.9	70.8	71.5	74.5
Inquest						
or Coroner's P.M. without inquest						
or other cases reviewed by coroners	11.2	11.2	14.0	19.4	20.1	21.4
Cases certified by Medical Practitioners	39.8	42.5	46.9	51.4	51.4	53.1
Not seen after death	48.5	46.1	38.8	29.1	28.3	25.2
No statement	0.5	0.2	0.3	0.1	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total deaths in year	460,389	496,465	517,615	503,529	501,896	527,651

\*Estimated from a sample of medical certificates.

#### Mortality analysis by method of certification

Table CXXV (page 208) shows the number of deaths in 1959 for 46 groups of causes analysed according to the basis of the diagnosis of the cause of death, whether by a certifying medical practitioner, coroner's certificate or uncertified. Of a total of 527,651 deaths, 80,156 were registered on the basis of a coroner's certificate after inquest or on the results of a post-mortem examination ordered by a coroner, without an inquest. In 70,416 of these deaths a post-mortem was held.

Of the 445,985 deaths registered on a certificate from a medical practitioner, post-mortem examinations were made in 42,627 cases. There were 1,510 uncertified deaths, i.e. deaths where no doctor could give a certificate, usually because no doctor was in attendance during the last illness and the coroner did not think it necessary to hold an inquest or order a post-mortem examina-

tion; 987 of such deaths were assigned to arteriosclerotic and degenerative heart disease. The percentage distribution in 1959 compared with that in 1954 was:

	1959	1954
Coroner:		
Inquest, with post-mortem	3.1	3.3
" no " "	1.8	1.8
Post-mortem without inquest	10.2	8.3
Certifying medical practitioner:		
After post-mortem	8.1	9.1
Operation mentioned on certificate	1.8	2.1
Other examination mentioned	0.1	0.1
No examination mentioned	74.6	74.8
Uncertified	0.3	0.5

The only noteworthy variations are an increase in the proportion of deaths registered on a coroner's certificate after a post-mortem without inquest and a decrease in the proportion registered on diagnosis by a certifying medical practitioner after post-mortem.

For young children whose deaths were assigned to birth injuries, and post-natal asphyxia and atelectasis (ICD Nos. 760-762) the proportion certified after post-mortem was 53 per cent, and for those assigned to infections of the newborn (ICD Nos. 763-768) 66 per cent.

Table CXXV. Deaths by cause and sex, according to method of certification, 1959, England and Wales

Cause of death	ICD No.	Total deaths		Coroner						Certifying medical practitioner								Uncertified	
				Inquest held				Post-mortem without inquest		After post-mortem		Operation mentioned on death certificate		Other examination mentioned on death certificate		No examination mentioned			
				With post-mortem		No post-mortem													
				M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>All causes</b>		<b>269,878</b>	<b>257,773</b>	<b>10,527</b>	<b>5,993</b>	<b>5,730</b>	<b>4,010</b>	<b>32,440</b>	<b>21,456</b>	<b>23,787</b>	<b>18,840</b>	<b>4,863</b>	<b>4,625</b>	<b>198</b>	<b>192</b>	<b>191,443</b>	<b>202,037</b>	<b>890</b>	<b>620</b>
Tuberculosis of respiratory system ...	001-008	2,620	854	100	5	33	2	420	118	285	132	34	17	3	1	1,743	577	2	2
Tuberculosis, other forms ...	010-019	190	190	6	3	1	—	29	23	64	70	5	4	—	—	85	90	—	—
Syphilis and its sequelae ...	020-029	627	331	4	1	3	1	147	120	116	65	9	1	—	—	347	143	1	—
Typhoid fever ...	040	2	1	—	—	—	—	—	1	2	—	—	—	—	—	—	—	—	—
Dysentery, all forms ...	045-048	18	15	1	3	1	—	3	3	6	2	—	—	—	—	7	7	—	—
Scarlet fever and streptococcal sore throat ...	050, 051	12	9	1	—	—	—	4	2	—	4	—	—	—	—	7	3	—	—
Whooping cough ...	056	11	14	—	—	—	—	1	—	4	4	—	—	—	—	6	9	—	—
Meningococcal infections ...	057	97	62	—	2	—	—	33	23	28	13	—	—	—	—	36	24	—	1
Acute poliomyelitis ...	080	41	25	—	2	—	—	6	4	7	10	1	—	—	—	27	9	—	—
Measles ...	085	49	49	1	—	—	—	11	8	8	11	—	—	—	—	29	30	—	—
Typhus and other rickettsial diseases ...	100-108	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Malaria ...	110-117	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
All other diseases classified as infective and parasitic ...	Rem.001-138	474	439	25	25	13	8	69	60	125	110	3	1	—	—	239	235	—	—
Malignant neoplasms ...	140-205	51,783	45,334	245	65	90	18	1,927	1,204	5,667	3,978	2,780	3,380	161	157	40,895	36,523	18	9
Benign and unspecified neoplasms ...	210-239	541	735	14	12	4	8	84	149	128	164	33	85	5	10	273	307	—	—
Diabetes mellitus ...	260	1,100	2,093	11	5	2	1	71	103	144	254	31	51	—	—	839	1,675	2	4
Anaemias ...	290-293	582	1,109	6	4	2	2	26	49	95	175	2	—	1	—	449	878	1	1
Vascular lesions affecting central nervous system ...	330-334	30,897	44,253	110	41	47	12	1,857	2,594	1,413	1,649	12	10	1	3	27,408	39,867	49	77
Non-meningococcal meningitis ...	340	180	134	3	—	—	1	33	20	60	41	—	1	—	84	70	—	1	
Rheumatic fever ...	400-402	63	63	2	1	1	—	23	22	12	16	—	—	—	—	25	24	—	—
Chronic rheumatic heart disease ...	410-416	2,482	4,589	36	12	6	5	430	526	322	514	22	46	—	—	1,659	3,479	7	7
Arteriosclerotic and degenerative heart disease ...	420-422	72,700	64,224	490	89	168	37	16,773	7,946	3,221	2,368	27	18	8	5	51,386	53,401	627	360
Other diseases of heart ...	430-434	5,644	7,120	25	11	13	1	265	223	369	319	7	8	—	—	4,950	6,531	15	26
Hypertension with heart disease ...	440-443	4,656	6,719	22	8	7	1	535	495	257	268	1	4	—	—	3,823	5,936	11	7
Hypertension without mention of heart ...	444-447	3,269	3,555	26	4	8	4	569	629	301	219	4	2	—	—	2,349	2,693	12	4
Influenza ...	480-483	3,898	3,964	18	5	7	3	340	250	164	151	1	1	—	1	3,363	3,546	5	7
Pneumonia ...	490-493	13,203	13,387	95	41	27	15	1,882	1,388	1,635	1,195	4	2	1	—	9,543	10,725	16	21
Bronchitis ...	500-502	20,193	8,858	243	18	91	6	1,754	800	1,246	461	1	—	—	—	16,836	7,564	21	9
Ulcer of stomach and duodenum ...	540, 541	3,090	1,473	57	6	16	3	553	273	911	409	351	126	3	2	1,198	653	1	1
Appendicitis ...	550-553	430	271	15	7	3	5	68	57	123	63	63	44	—	—	158	95	—	—
Intestinal obstruction and hernia ...	560, 561, 570	1,413	1,570	35	30	13	8	314	362	396	369	208	195	—	1	446	604	1	1
Gastritis, duodenitis, enteritis, and colitis, except diarrhoea of the newborn ...	543, 571, 572	951	1,381	19	9	7	7	166	197	262	363	49	97	—	1	446	706	2	1
Cirrhosis of liver ...	581	617	586	28	20	10	5	81	63	160	143	4	7	1	1	332	347	1	—
Nephritis and nephrosis ...	590-594	1,923	1,762	7	5	5	1	110	106	318	267	—	3	—	—	1,481	1,379	2	1
Hyperplasia of prostate ...	610	3,505	—	35	—	13	—	177	—	484	—	731	—	2	—	2,061	—	2	—
Complications of pregnancy, childbirth, and the puerperium ...	640-689	—	290	—	57	—	15	—	103	—	68	—	5	—	—	—	41	—	1
Congenital malformations ...	750-759	2,503	2,408	23	11	4	4	416	312	754	676	61	56	1	3	1,239	1,337	5	9
Birth injuries, postnatal asphyxia and atelectasis ...	760-762	2,818	1,743	13	7	7	4	163	119	1,322	799	—	1	—	—	1,309	806	4	7
Infections of the newborn ...	763-768	511	338	10	4	1	—	82	58	240	163	—	—	—	—	176	113	2	—
Other diseases peculiar to early infancy, and immaturity unqualified ...	769-776	2,177	1,726	3	—	—	—	49	37	492	392	3	1	1	—	1,622	1,291	7	5
Senility without mention of psychosis, ill-defined and unknown causes ...	780-795	2,718	5,094	35	20	11	11	19	54	13	21	—	—	—	—	2,624	4,970	16	18
All other diseases ...	Rem.140-795	18,433	21,624	556	213	161	65	2,842	2,837	2,608	2,876	410	441	9	6	11,813	15,155	34	31
Motor vehicle accidents ...	E810-E835	4,414	1,612	2,903	1,052	1,498	558	4	1	—	—	1	1	—	—	1	—	7	—
All other accidents ...	{ E800-E802 E840-E962 E963 E970-E979 }	5,745	5,533	3,261	2,664	2,238	2,502	94	112	25	36	5	17	—	—	103	193	19	9
Suicide and self-inflicted injury ...	{ E964, E965, E980-E999 }	3,116	2,091	1,936	1,417	1,174	669	6	4	—	—	—	—	—	—	—	1	—	—
Homicide and operations of war ...	{ E964, E965, E980-E999 }	181	143	107	114	45	28	4	—	—	1	—	—	—	—	25	—	—	—

**Live births, stillbirths and stillbirth rates by age and parity of mother  
and place of confinement**

In England and Wales in 1959 there were 748,501 live births and 15,901 stillbirths. The tables below give details of the distribution of these births by place of confinement, age and parity of mother.

*A set of tables is available for reference at the General Register Office showing numbers of live and still births with a breakdown as in Tables CXXVII and CXXVIII for individual county boroughs and administrative counties within England and Wales. A copy of these tables, or of a table for a particular area, can also be obtained from the General Register Office on payment.*

**Table CXXVI. Births by place of confinement, 1959, England and Wales**

*Note. Institutions described as "Other hospital" are mainly maternity homes*

Place of confinement	Live births	Stillbirths	Total births	Total births per cent by place of confinement*	Stillbirth rate per 1,000 total births*
N.H.S. hospital ...	451,613	12,680	464,293	60.7 (60.5)	27.3 (28.1)
Other hospital ...	26,086	298	26,384	3.5 (3.5)	11.3 (11.3)
At home ... ..	253,716	2,698	256,414	33.5 (33.7)	10.5 (11.3)
Other ... ..	17,086	225	17,311	2.3 (2.3)	13.0 (14.7)
<b>Total ... ..</b>	<b>748,501</b>	<b>15,901</b>	<b>764,402</b>	<b>100.0</b>	<b>20.8 (21.5)</b>

\*The figures in brackets are the corresponding figures for 1958.

Table CXXVII. Live births by age and parity\* of mother and place of confinement, 1959, England and Wales

Note. Institutions described as "Other hospital" are mainly maternity homes

Age-group	Parity of mother															
	0				1-3				4 and over				Total			
	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other
All ages ...	242,818	11,576	46,750	8,515	181,896	13,595	177,535	8,248	26,899	915	29,431	323	451,613	26,086	253,716	17,086
Under 25 ...	137,668	6,283	26,708	6,351	44,877	2,868	44,776	3,723	557	33	746	12	183,102	9,184	72,230	10,086
25- ...	90,969	4,813	17,233	2,020	106,092	8,634	111,395	4,149	13,008	477	17,366	216	210,069	13,924	145,994	6,385
35 and over	13,755	464	2,650	127	30,658	2,084	21,012	366	13,275	403	11,245	95	57,688	2,951	34,907	588
Not stated	426	16	159	17	269	9	352	10	59	2	74	—	754	27	585	27

\*Parity in this instance means the number of previous liveborn children.

Table CXXVIII. Stillbirths by age and parity\* of mother and place of confinement, 1959, England and Wales

Note. Institutions described as "Other hospital" are mainly maternity homes

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Age-group	Parity of mother															
	0				1-3				4 and over				Total			
	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other
All ages ...	6,225	142	779	150	5,163	146	1,471	64	1,292	10	448	11	12,680	298	2,698	225
Under 25 ...	2,997	67	373	72	892	26	252	20	14	—	4	—	3,903	93	629	92
25- ...	2,534	63	282	31	2,926	87	870	38	539	3	202	7	5,999	153	1,354	76
35 and over	628	12	82	7	1,331	32	345	6	731	7	240	4	2,690	51	667	17
Not stated	66	—	42	40	14	1	4	—	8	—	2	—	88	1	48	40

\*Parity in this instance means the number of previous liveborn children.

Table CXXIX. Percentage distribution of births for each place of confinement within each age and parity\* group, 1959, England and Wales

Note. Institutions described as "Other hospital" are mainly maternity homes

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Age-group	Parity of mother															
	0				1-3				4 and over				Total			
	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other
All ages ...	78	4	15	3	48	4	46	2	47	2	50	1	61	3	34	2
Under 25 ...	77	4	15	4	47	3	46	4	42	2	55	1	67	3	26	4
25- ...	79	4	15	2	46	4	48	2	42	2	55	1	56	4	38	2
35 and over	81	3	15	1	57	4	38	1	54	2	44	0	60	3	36	1
Not stated	65	2	26	7	43	1	54	2	46	1	53	—	54	2	40	4

\*Parity in this instance means the number of previous liveborn children.

Table CXXX. Stillbirth rates per 1,000 total births, by age and parity\* of mother and place of confinement, 1959, England and Wales

Note. Institutions described as "Other hospital" are mainly maternity homes

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Age-group	Parity of mother												Total			
	0				1-3				4 and over							
	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other	N.H.S. hospital	Other hospital	At home	Other
All ages ...	25	12	16	17	28	11	8	8	46	11	15	33	27	11	11	13
Under 25 ...	21	11	14	11	19	9	6	5	25	—	5	—	21	10	9	9
25- ...	27	13	16	15	27	10	8	9	40	6	11	31	28	11	9	12
35 and over	44	25	30	52	42	15	16	16	52	17	21	40	45	17	19	28
Not stated	134	—	209	702	49	100	11	—	119	—	26	—	105	36	76	597

\*Parity in this instance means the number of previous liveborn children.

Table CXXXI. Stillbirth rates per 1,000 total births, by parity\* of mother and place of confinement, 1959, England and Wales, standard regions and Wales

Note. Institutions described as "Other hospital" are mainly maternity homes

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Area	Parity of mother																			
	0					1-3					4 and over					Total				
	N.H.S. hospital	Other hospital	At home	Other	Total	N.H.S. hospital	Other hospital	At home	Other	Total	N.H.S. hospital	Other hospital	At home	Other	Total	N.H.S. hospital	Other hospital	At home	Other	Total
ENGLAND AND WALES	25	12	16	17	23	28	11	8	8	18	46	11	15	33	30	27	11	11	13	21
Standard regions:																				
Northern ...	27	19	19	16	25	31	12	9	9	19	51	29	18	23	31	30	16	13	12	22
East and West Ridings ...	27	10	15	15	24	28	9	7	2	17	50	51	13	87	32	29	10	10	10	21
North Western ...	26	11	20	28	25	32	8	8	7	20	49	—	16	—	32	30	9	11	16	23
North Midland ...	27	7	16	11	24	31	10	9	7	18	44	—	16	—	28	30	8	11	9	21
Midland ...	28	15	17	9	25	32	15	9	9	19	55	—	14	31	32	31	15	11	10	23
Eastern ...	23	10	13	6	19	32	11	7	7	16	45	7	18	50	30	28	11	9	7	19
London and South Eastern	21	11	15	30	20	21	9	8	7	15	34	16	11	30	24	22	10	9	21	18
Southern ...	24	12	13	24	21	24	14	6	6	15	38	—	12	—	24	25	12	8	16	18
South Western ...	25	20	13	9	23	25	9	7	6	16	48	15	15	—	31	27	14	9	7	20
Wales (including Monmouthshire) ...	31	11	27	30	30	30	9	12	17	22	47	—	19	100	34	32	10	16	25	26
Wales I (South East) ...	33	12	27	26	31	34	10	12	19	23	56	—	16	143	36	35	11	15	24	27
Wales II (remainder) ...	28	—	30	39	29	22	—	12	12	19	28	—	30	77	30	25	—	17	26	24

\*Parity in this instance means the number of previous liveborn children.

## ADVISORY COMMITTEE ON MEDICAL NOMENCLATURE AND STATISTICS

Report (dated June 1960) on the work of the Committee for 1957 to 1959

### Introductory

This, the fifth report on the Committee's work, covers a period of three years. The Committee was first appointed in November 1948. A list of members is given at the end of the report.

During the period covered by this report the Committee met three times. An indication of some of the matters dealt with is given in the following paragraphs under the three main headings of National, International and Work of Sub-committees.

### National

**Medical certification of cause of death.** The Committee considered the results of a small enquiry comparing diagnoses on medical certificates of cause of death by clinicians before post-mortem and by pathologists after post-mortem. The enquiry revealed that in about one-fifth of the cases a new finding was given by the pathologist as a result of the post-mortem. The Committee recommended that a larger enquiry should be held, and this was carried out with the co-operation of about 100 hospitals over a period of six months, during 1959. The results of this further enquiry are now being analysed.

The Committee also recommended that efforts should be made to get further information in cases where post-mortem findings became available after completion of the death certificate. It is proposed to do this by providing for a statement by the certifying practitioner on the death certificate that post-mortem information may be available later. An enquiry can then be sent to the certifier.

**Mental health statistics.** The Committee recommended that more publicity should be given to these statistics. Papers based on statistics from the scheme have since been published in the *Monthly Bulletin of the Ministry of Health* (1958), the *Journal of Mental Science* (1959), and the *Eugenics Review* (1960). Papers have also been presented (and subsequently published) to the Royal Society of Medicine and the Second International Congress for Psychiatry in Zurich. Lectures and information have also been given to the hospital staffs.

**Cancer registration.** The Committee urged that every effort should be made to extend the scheme to cover completely all areas of the country. Discussions between the Ministry of Health and the General Register Office are being held to consider the best means of furthering this aim. Steady progress has been made in establishing regional cancer registries and it is probable that over 70 per cent of new cancer cases are now being registered in the scheme.

### International

**Histological classification of tumours.** The Committee considered the statistical code prepared by the International Union Against Cancer to assist in carrying out work on the compilation and analysis of cancer statistics, and found it unsatisfactory for that purpose. The Registrar General informed the World Health Organization of the position.

**Classification of heat illness.** The Committee maintained contact with what was being done in this field with a view to considering any possible changes which might be proposed for the Eighth Revision of the International Classification of Diseases.

**Morbidity statistics.** The Committee took note of the resolution on the importance of morbidity statistics carried at the Eleventh World Health Assembly and considered some of the difficulties in the way of reliable international comparisons in this field.

### Work of Sub-committees

**The Statistics Sub-committee** met five times during the period and considered a number of problems affecting the presentation of mortality statistics. In particular the Sub-committee recommended the abandonment of the Comparative Mortality Index and the substitution of some other method of standardisation. The Committee endorsed these recommendations and as a result the Registrar General introduced a number of changes into the Medical Tables Volume of the *Statistical Review* for 1958.

**The Cardiovascular Sub-committee** met eight times during the period. After preliminary discussion of the difficulties in the present Classification of this group of diseases in the International Classification, members of the Sub-committee have proposed three alternative classifications which are being considered in detail.

### Members of the Committee

- Sir Ernest Rock Carling, LL.D., M.B., B.S., F.R.C.S., F.R.C.P., F.F.R.  
(Chairman)
- Professor W. Melville Arnott, M.D., F.R.C.P.
- H. J. B. Atkins, D.M., M.Ch., F.R.C.S. (from 18th November 1958)
- Professor A. L. Banks, M.D., F.R.C.P., D.P.H.
- G. O. Barber, O.B.E., M.A., M.B., B.Chir., M.R.C.S. (from 18th November 1958)
- E. W. Bedford Turner, M.R.C.S., L.C.R.P. (until 21st August 1958)
- Sir Allen Daley, M.D., F.R.C.P., D.P.H.
- J. O. F. Davies, M.D., B.S., M.R.C.S., L.R.C.P., D.P.H. (from 18th November 1958)
- Surgeon Captain F. P. Ellis, O.B.E., M.D., M.R.C.P., R.N. (from 28th March 1958)
- Miss Joan M. Faulkner, M.B., D.P.H.
- Sir Ernest Finch, M.D., M.S., F.R.C.S. (until 28th August 1958)
- J. Fry, M.D., F.R.C.S., L.R.C.P. (from 18th November 1958)
- Professor R. B. Green, M.A., M.B., F.R.C.S., D.C.L. (from 18th November 1958)



**Members of the Committee—continued**

Professor F. Grundy, M.D., M.R.C.P., D.P.H.  
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Professor A. Bradford Hill, C.B.E., D.Sc., Ph.D., F.R.S.  
Surgeon Captain J. M. Holford, O.B.E., M.B., F.R.C.P., R.N. (until 28th March 1958)  
T. Lloyd Hughes, M.D., D.P.H. (until 20th August 1958)  
A. E. Joll (until 18th September 1958)  
W. N. Leak, M.A., M.D. (from 18th November 1958)  
Professor Sir Aubrey Lewis, M.D., F.R.C.P.  
W. J. Littlewood (from 18th September 1958)  
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Sir Arthur Massey, C.B.E., M.D., D.P.H., Q.H.P. (until 31st March 1959)  
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Professor W. C. W. Nixon, M.D., F.R.C.S., F.R.C.O.G. (until 20th August 1958)  
W. N. Pickles, C.B.E., M.D., M.R.C.P. (until 20th August 1958)  
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Professor R. E. Tunbridge, O.B.E., M.D., F.R.C.P. (until 20th August 1958)  
Professor W. S. Walton, G.M., M.D., D.P.H. (until 23rd July 1958)

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Miss Vera Norris, M.B., Ph.D. (died 16th September 1957)  
Mrs. Lilli Stein, Ph.D.

*Secretary:* F. A. Rooke-Matthews (until June 1957) } General  
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Office

## GREAT BRITAIN AND IRELAND

### Vital statistics

Table A1 of Part II shows the population, with figures for the constituent countries of Great Britain at each census beginning with that of 1801 and of Great Britain and Ireland since the first census was taken in Ireland in 1821. This table also gives the population estimates for each mid-year from 1921. Figures for Northern Ireland and the Irish Republic relate throughout to the areas now so named.

Table W of Part II gives current *home* population data with marriage, live birth, death and infant mortality rates. These are repeated in Table CXXXII below where similar rates for earlier years are added for comparison.

Table CXXXII. Vital statistics: 1938 and 1946 to 1959, Great Britain and Ireland

	Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic <sup>(1)</sup>
Estimated mid-year home population (in thousands)						
1959	Males 26,501 Females 28,331 Persons 54,832	20,599 22,164 42,763	1,286 1,337 2,623	2,495 2,697 5,192	686 722 1,408	1,435 1,411 2,846
Marriages <sup>(2)</sup>						
1959 ...	405,439	320,928	19,198	40,448	9,610	15,255
Persons marrying per 1,000 living						
1938 ...	16.8	17.6	16.2	15.5	13.4	10.1
1946-50 ...	17.1	17.7	17.4	16.9	13.9	11.0
1951-55 ...	15.6	15.9	15.7	16.3	13.5	10.8
1956 ...	15.6	15.8	15.6	17.1	13.4	11.6
1957 ...	15.2	15.5	15.1	16.6	13.4	10.0
1958 ...	14.9	15.1	14.7	15.9	13.2	10.6
1959 ...	14.8	15.0	14.6	15.6	13.7	10.7
Live births <sup>(3)(4)</sup>						
1959 ...	938,749	706,239	42,262	99,251	30,809	60,188
Per 1,000 living						
1938 ...	15.7	15.1	15.3	17.7	20.0	19.4
1946-50 ...	18.5	18.0	17.9	19.8	22.0	22.2
1951-55 ...	16.0	15.3	15.7	17.8	20.8	21.3
1956 ...	16.4	15.7	15.7	18.5	21.1	21.0
1957 ...	16.8	16.1	15.9	19.0	21.5	21.2
1958 ...	17.1	16.4	16.2	19.2	21.6	20.9
1959 ...	17.1	16.5	16.1	19.1	21.9	21.1

Table CXXXII—continued

	Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic <sup>(1)</sup>
Deaths <sup>(4)</sup>						
1959 ...	640,358	495,517	32,134	63,061	15,403	34,243
Per 1,000 living						
1931-38 <sup>(5)</sup> ...	12.4	12.0	12.9	13.3	14.4	14.2
1946-50 ...	11.9	11.7	12.6	12.5	11.9	13.3
1951-55 ...	11.8	11.6	12.7	12.1	11.3	12.5
1956 ...	11.7	11.6	12.4	12.0	10.6	11.7
1957 ...	11.5	11.4	12.5	11.9	10.9	11.9
1958 ...	11.7	11.6	12.5	12.0	10.8	12.0
1959 ...	11.7	11.6	12.3	12.1	10.9	12.0
Infant mortality (deaths of infants under one year of age) <sup>(6)</sup>						
1959 ...	22,247	15,516	1,113	2,816	875	1,927
Per 1,000 live births						
1938 ...	55	53	57	70	75	67
1946-50 ...	39	36	42	47	48	57
1951-55 ...	29	27	33	33	37	40
1956 ...	25	23	29	29	29	36
1957 ...	25	23	28	29	29	33
1958 ...	24	22	27	28	28	35
1959 ...	24	22	26	28	28	32

<sup>(1)</sup> The Irish Republic rates are based on *home* population throughout the table.

<sup>(2)</sup> The marriage and live birth rates for 1938 and from 1951 are based on *home* populations, but the 1946-50 aggregates (except for the Irish Republic) are based on *total* populations.

<sup>(3)</sup> England and Wales: occurrences. Remainder: registrations.

<sup>(4)</sup> The death rates are based on total deaths and *home* populations, except that (apart from the Irish Republic) the 1946-49 element in the 1946-50 aggregates is based on civilian deaths and *civilian* populations.

<sup>(5)</sup> Here the 1931-38 aggregate is given, since crude death rates in the year 1938 were rather lower than in adjacent years.

<sup>(6)</sup> England and Wales: for 1957 onwards based on deaths per thousand occurrences, for earlier years based on deaths per thousand related live births. Remainder: based on deaths per thousand births registered.

**Population.** The home population of Great Britain and Ireland at mid-1959 was estimated to be 54,832,000, an increase of 3.1 per cent on the 1951 Census population of 53,186,000. But this increase in the two islands as a whole was not uniform throughout the constituent parts. These showed population increases of: United Kingdom, 3.5 per cent; England and Wales, 3.7 per cent (England, 3.9 per cent; Wales, 0.92 per cent); Scotland, 1.9 per cent; Northern Ireland, 2.7 per cent. The population of the Irish Republic, however, declined in the period to 96.1 per cent of its 1951 Census figure.

**Marriage rates.** The fall in the marriage rate for Great Britain and Ireland continued in 1959, when it was 14.8 per thousand compared with 14.9 in 1958 and 15.2 in 1957. But while the marriage rate for Scotland remained significantly higher and that for the Irish Republic significantly lower than the rate for Great Britain and Ireland combined, Northern Ireland and the Irish Republic were the only two of the five constituent countries where the rate did not fall.

**Birth rates.** The live birth rate in 1958 (17.1 per thousand) was maintained in 1959 for Great Britain and Ireland as a whole. Moreover, the rates in the individual countries differed only slightly in each of the two years. The rates in England and Wales remained as always significantly lower than those in Scotland and Ireland.

**Infant mortality rates.** In 1958 Great Britain and Ireland together had achieved a new low level in an infant mortality rate of only 24 deaths per thousand live births. This reflected a slight fall from the 1957 rate in each constituent country except the Irish Republic, where the rate had risen from 33 to 35 deaths per thousand live births. In 1959 the infant mortality rate for the two islands together was sustained at the 1958 level of 24; but the rate for the Irish Republic improved from 35 to 32 and that for Wales from 27 to 26.

**Cause of death.** Table 7 of Part I gives a complete analysis for England and Wales of deaths by cause and sex at all ages for each year from 1949 to 1959. Appendix A of Part I includes death rates per million population (by sex) both *in toto* and by selected causes for England and Wales, for Scotland and for Northern Ireland separately in 1959. The selection covers all the principal types of cause and also considerable subdivision of these. In Table CXXXIII some of this information is repeated, with the addition of relevant data for the Irish Republic. The number of deaths from all causes and the death rates per million living are given (by sex) for each constituent country in 1959, followed by similar information for eleven main types of cause. A separate set of figures in the case of deaths from malignant neoplasms is added for those of the trachea, bronchus and lung. The extent to which this table covers the main types of cause of death is indicated by the fact that for England and Wales the types listed accounted for 76 per cent of deaths of males and 74 per cent of those of females in 1959.

Table CXXXIII. Deaths and death rates by sex from certain causes, 1959, England and Wales, Scotland, Northern Ireland and Irish Republic

Cause of death (and ICD No.)	Deaths				Death rates per million living			
	England and Wales	Scotland	Northern Ireland	Irish Republic	England and Wales	Scotland	Northern Ireland	Irish Republic
All causes... .. {M	269,878	32,454	7,979	18,603	12,332	13,010	11,636	12,964
... .. {F	257,773	30,607	7,424	15,640	10,969	11,348	10,283	11,084
Tuberculosis of respiratory system (001-008) ... .. {M	2,620	344	85	284	120	138	124	198
... .. {F	854	169	37	167	36	63	51	118
Tuberculosis, other forms (010-019) ... .. {M	190	35	12	40	9	14	18	28
... .. {F	190	28	9	26	8	10	12	18
Malignant neoplasms (140-205) ... .. {M	51,783	5,878	1,230	2,617	2,366	2,356	1,794	1,824
... .. {F	45,334	5,154	1,114	2,160	1,929	1,911	1,543	1,531
Malignant neoplasm of trachea, bronchus and lung (162, 163) ... .. {M	18,181	1,958	278	429	831	785	405	299
... .. {F	2,882	372	68	98	123	138	94	69
Vascular lesions affecting central nervous system (330-334) ... .. {M	30,897	4,049	878	1,757	1,412	1,623	1,280	1,224
... .. {F	44,253	5,813	1,208	2,033	1,883	2,155	1,673	1,441
Arteriosclerotic heart disease, including coronary disease (420) ... .. {M	52,193	6,641	1,711	2,504	2,385	2,662	2,495	1,745
... .. {F	32,729	3,982	1,021	1,399	1,393	1,476	1,414	991
Other diseases of heart (421, 422, 430-434) ... .. {M	26,151	3,455	961	3,426	1,195	1,385	1,401	2,387
... .. {F	38,615	5,102	1,206	3,168	1,643	1,892	1,670	2,245
Hypertensive disease (440-447) ... .. {M	7,925	726	220	477	362	291	321	332
... .. {F	10,274	955	240	561	437	354	332	398
Bronchitis (500-502) ... .. {M	20,193	1,765	370	735	923	708	540	512
... .. {F	8,858	791	198	396	377	293	274	281
Nephritis and nephrosis (590-594) ... .. {M	1,923	205	78	230	88	82	114	160
... .. {F	1,762	206	51	180	75	76	71	128
Motor vehicle accidents (E810-E835) ... .. {M	4,414	447	129	196	202	179	188	137
... .. {F	1,612	165	39	49	69	61	54	35
Other accidents (E800-E802, E840-E962) ... .. {M	5,745	1,039	171	380	263	417	249	265
... .. {F	5,533	743	134	234	235	275	186	166

## INTERNATIONAL CO-OPERATION IN POPULATION AND HEALTH STATISTICS

United Nations

### Population Commission

The tenth session of the Population Commission was held in Geneva from the 9th to the 20th February 1959. The United Kingdom was represented by Mr. B. Benjamin of the General Register Office. Mr. J. Mertens de Wilmars (Belgium) was elected to the Chair with Mr. T. V. Ryabushkin (USSR) Vice-Chairman and Mr. Kingsley Davis (United States) *Rapporteur*. Representatives of all fifteen member countries were present at the session, which was also attended by representatives of FAO, ILO, Unesco and WHO and of seventeen non-governmental organizations associated with the United Nations.

The dominant theme of the Report<sup>1</sup>—that the United Nations, the specialized agencies and governments need to know more about the interplay of demographic characteristics with economic and social factors—flowed naturally from the emphasis put at the beginning of it on 'the fact that the earth's population is growing more rapidly than ever in the past'. Calculations prepared by the Secretariat for the consideration of the Commission showed that in the twelve months ending in December 1960 the earth's population was expected to increase by a hundred million. That this growth was greater in the less industrial countries had special implications for the United Nations with their pledge to make the needs of those countries a first charge on available resources. In the Report the Commission set out the salient figures of world population as it was then and what it might be in forty years from that time if current trends, interpreted in the light of moderate assumptions of changes in birth and death rates, were not disturbed by some unforeseen development. In drawing the attention of the Economic and Social Council to these figures, the Commission agreed that this rapid growth posed for governments questions that were both serious and urgent even though there was some difference of opinion about long-term prospects.

On the basis that the important thing for the United Nations to do was to maintain a current supply of the kind of information required by governments in order to get population questions into proper perspective when formulating their policies for economic and social development, the Commission considered how this might best be achieved. It was essential to keep a constant watch on trends in population growth throughout the world. To this end there was a continuing need for regional demographic surveys (in association with regional commissions), for estimates and projections of population size and structure, for studies of internal migration with special reference to industrialization and urbanization in under-developed countries and to demographic pilot studies in selected agrarian countries. The Commission did not overlook the fact that the effectiveness of these measures would be hampered to the extent that adequate data were still lacking for large areas of the world. Great progress had been made, but there was much to be done with the aid of experts assigned

to governments under technical assistance programmes, regional centres for demographic training and research, seminars and technical working groups on the appraisal and use of census results and manuals and other publications issued by United Nations with a view to improving the scale and quality of population and related statistics.

The Commission drew particular attention to the shortage of people qualified to staff training centres and to be assigned to governments as advisers on population statistics and questions.

Two draft resolutions were proposed by the Commission for adoption by the Economic and Social Council. The first was on *demographic pilot studies*. Technical opinion in the Commission had considerable confidence in these studies as a means of acquiring information about the ways in which population changes and economic and social developments are interwoven in contemporary settings. The studies serve an important local purpose as well as a longer term international one. They are made in collaboration with governments and it is governments who gather the first fruits. A sample survey of private households in the Philippines, intended to furnish data for one of these studies, provided the government with information on such things as fertility, migration, levels of education, family income and expenditure, the size and composition of the economically active population, the extent of unemployment and under-employment, internal migration and future population and labour force prospects.

The other draft resolution dealt with the *demographic aspects of urbanization and industrialization, with special reference to the study of internal migration*. This resolution was aimed at one of the problems besetting the less developed countries, namely, the movement from rural to urban areas at a time when agriculture needed to be intensified to match the demands of expanding populations for more food. The problem illustrates the kind of dilemma that can result from an ill-planned development policy which, ignoring the demographic situation, draws labour to the towns before the introduction of modern methods makes farming less dependent on sheer numbers.

### Commission on the Status of Women

The thirteenth session of the Commission was held at United Nations headquarters from the 9th to the 27th March. The United Kingdom was represented by Miss Ruth Tomlinson, with Mr. P. W. J. Buxton (United Kingdom Mission to United Nations) and Mr. A. C. Dugdale (Foreign Office) as alternates.

Arising out of earlier discussions on the status of women in private law, the Commission recommended<sup>2</sup> that the Economic and Social Council should request the Secretary-General to draft a convention on age of marriage, free consent and registration of marriages, with a view to prescribing standards on these matters which would give effect to the provisions of the Universal Declaration of Human Rights. A resolution previously recommended by the Commission at its twelfth session<sup>3</sup> had been modified by the Economic and Social Council which had requested the Secretary-General to prepare a 'recommendation' instead of a draft convention.<sup>4</sup> It was the opinion of the Commission that a mere recommendation would be inadequate and the Economic and Social Council was asked to consider the matter again.<sup>3</sup> In the event the Council adopted the following resolution<sup>5</sup>:

*The Economic and Social Council,*

Recalling its resolution 680 B (XXVI) of 10 July 1958 concerning a minimum age of marriage, the requirement of the free consent of both parties to the marriage, and the compulsory registration of marriages,

1. *Considers* that it may be appropriate to prescribe desirable standards in these fields by means of international instruments prepared under the auspices of the United Nations;

2. *Requests* the Secretary-General to prepare for the fourteenth session of the Commission on the Status of Women a draft convention and a draft recommendation dealing with the three questions referred to above, including provisions for regular reporting by the Governments of Member States.

**European Working Group on Censuses of Population and Housing**

A Group of *Rapporteurs* on Locality Statistics and Urban-Rural Classification met in Prague from the 8th to the 13th May. Mr. Benjamin was elected Chairman by the Group, whose other members came from Czechoslovakia, the Federal Republic of Germany, France, the Netherlands and Yugoslavia.<sup>6</sup>

The function of the Group was to consider the purposes of statistics for local areas in relation to different types of locality and with reference to the need for maintaining consistency with other census statistics. In making a first essay towards a classification of local areas by function and types and in drafting a tabulation scheme, the Group was guided by answers received from twenty-one European countries in reply to a questionnaire circulated by the Secretariat.

After examining the purposes of classifying population by urban and rural groups, the *Rapporteurs* considered the criteria on which a classification should be based and came to the conclusion that a two-fold distinction between urban areas and rural areas was a less satisfactory basis in present day conditions than the application of criteria which included size of population, density of housing, proportion of population engaged in agriculture or in manufacturing and service industries, use of common transport, education, postal and other services and the existence of a common cultural focus. Specific proposals were remitted to the Conference of European Statisticians.

**Conference of European Statisticians**

The United Kingdom was represented by Sir Harry Champion and Mr. J. W. S. Walton of the Central Statistical Office at the seventh plenary session, held in Geneva from the 8th to the 12th June.

The Conference approved<sup>7</sup> the European Programme for National Population Censuses<sup>8</sup> and the European Programme for National Housing Censuses<sup>9</sup> which were submitted by the Working Group on Censuses of Population and Housing as regional adaptations of the *Principles and Recommendations for National Population Censuses* and *General Principles for a Housing Census* which had already been published by the United Nations for international use.

The Conference invited countries taking censuses of population to consider arranging, where possible, individual or collective visits of experts to study methods used, by participating in the work of taking the census or otherwise,

and agreed to continue exchange of information on plans for the forthcoming censuses of population by means of the preparation of national reports.

The Conference also took note of the Report<sup>6</sup> by the Group of *Rapporteurs* on Locality Statistics and Urban-Rural Classification and agreed that the Report should be issued as an annex to the final version of the European Programme for National Population Censuses for the guidance of countries which wanted to adopt more precise and detailed recommendations than those contained in the European Programme.

**Economic and Social Council**

The Council met twice during the year: the twenty-seventh session was at Mexico City from the 11th to the 24th April, the twenty-eighth session in Geneva from the 30th June to the 31st July.

At the first of these sessions the Report of the Population Commission, to which reference has already been made, was well received and the Council adopted the two resolutions<sup>10</sup> proposed by the Commission, the one on *demographic pilot studies*, the other on the *demographic aspects of urbanization and industrialization with special reference to the study of internal migration*.

It was at the twenty-eighth session that, as already noted, the Council modified the Social Commission's suggestion for a draft convention on age of marriage, free consent and registration of marriage.<sup>5</sup>

**Seminars on appraisal and use of census results**

In pursuance of a recommendation made earlier in the year by the Population Commission<sup>1</sup> the Secretary-General arranged a *Seminar on the evaluation and utilization of population census data in Latin America* held at Santiago, Chile, from the 30th November to the 18th December.<sup>11</sup>

The Seminar was able to draw on experience wider than that provided by those who actually conducted it because, in addition to papers prepared by teachers and pupils, there were others by experts in different parts of the world (for example, Mr. Benjamin contributed a paper on demographic indicators of levels of living).

**World Health Organization**

**World Health Assembly**

Sir John Charles, leader of the United Kingdom delegation, was elected President of the twelfth World Health Assembly in Geneva from the 12th to the 29th May.

The Assembly considered a Report by the Director-General on proposals for intensifying WHO's medical research programme and approved<sup>12</sup> in principle the plan of research proposed for the initial year 1960. The Assembly also decided to set up a Special Account, intended to attract voluntary contributions, to be used to supplement provision made for medical research in the regular budget. These decisions were taken after consideration of a report<sup>13</sup> (first presented to the Executive Board) in which the Director-General specified WHO's role as being to stimulate and initiate new research and to promote, organize and co-ordinate existing research by (a) supporting the expansion of work on special world health problems (as exemplified by current and

contemplated WHO programmes on special diseases) and (b) encourage and co-ordinate the development of medical research generally, particularly through the support of individual research work and through the advance training of research workers primarily in areas where medical research is in the early phases of development. The report outlined in detail the ways in which those objectives could be implemented and indicated fields in which international co-ordination and assistance was needed.

#### Executive Board

At the first of the two meetings of the Executive Board during the year, the twenty-third session held in Geneva from the 20th January to the 3rd February, the Board took note of the *Report of the sixth session of the Expert Committee on Health Statistics* and approved its publication. Details of the Report were given in the 1958 Commentary.<sup>14</sup>

At the twenty-fourth session, held in Geneva in June, the Executive Board received the first *Report of the Expert Committee on Cancer*<sup>15</sup> which had as its main subject the histopathology of lung tumours.

#### Regional Committee for Europe

It was noted in the Report<sup>16</sup> of the Regional Committee, which met in Bucharest from the 8th to the 11th September, that increased attention had been given to health statistics, 'a subject relatively little developed in many countries of the Region', and that a medical officer for statistics and epidemiology was to be appointed from the beginning of 1960 to assist member countries and to develop work on health statistics within the Regional Office, particularly with regard to the statistical evaluation of regional activities.

The Regional Committee also approved the programme and budget proposals for 1961 which included provision for a technical conference on vital statistics. The Conference is intended to provide health administrators and statisticians with an opportunity to consider the future development of vital statistics within the Region.

#### Study Group on Epidemiology of Cancer of the Lung

Dr. Richard Doll, Lecturer in Epidemiology and Member of the Statistical Research Unit, London School of Hygiene and Tropical Medicine, was Chairman of the Study Group which met in Geneva from the 16th to the 20th November. The Group noted the geographical variations in mortality from cancer of the lung, reviewed knowledge about aetiological factors (such as cigarette smoking, air pollution, specified industrial causes, etc.), and made a series of recommendations<sup>17</sup> on studies which needed to be made of the geographical variations, of special factors in relation to degree of exposure to specific agents, of multiple factors and of genetic and epidemiological aspects of the problem.

#### WHO Centre for the Classification of Diseases

In addition to the routine business of dealing with enquiries from countries on questions arising in the use of the International Classification of Diseases during 1959, the WHO Centre under the direction of Dr. Logan at the General Register Office continued work on the preparation of an instruction manual

intended for the training and guidance of coders using the seventh revision of the International List. Further studies were made, in collaboration with the Dominion Bureau of Statistics in Canada and the National Office of Vital Statistics in the United States, of a comparison of the coding of 6,000 causes of death selected from deaths in Canada, England and Wales and the United States during 1958. The Centre also began a study of the coding of samples of death certificates from certain European countries. The first batch was a pilot sample of 50 Danish certificates, classified according to the Latin version of the International List, which were coded by the Centre and compared with the Danish assignments.

The Centre made a preliminary investigation into methods of simplifying the Index to the International Classification of Diseases. A report was made on the points at which a special diagnostic list prepared by the College of General Practitioners differed from the International Classification. Further study was given to changes needed to make the Classification of Causes of Stillbirth suitable for classifying causes of perinatal mortality and work on the application of the International Classification to morbidity statistics included a study of coding of certificates of incapacity for work at the Statistical Branch of the Ministry of Pensions and National Insurance at Newcastle.

#### Western European Union

##### Working Party on Cancer Statistics

London was the meeting place of the Working Party on Cancer Statistics which met for the first time, with Dr. Logan in the Chair, on the 27th and 28th January. The Working Party had been set up as the result of a decision<sup>18</sup>, taken by the Public Health Committee of Western European Union at a meeting in Amsterdam in October 1958, that it should consist of an expert to be designated by each of the governments of Western European Union to examine available statistics relating to (a) cancer of the lung and bronchus and (b) cancer of the gastro-intestinal tract (including oesophagus) with a view to determining whether a statistical comparison of cancer at these sites could be made between various countries. The Public Health Committee further decided that, if a statistical comparison was thought possible, the Working Party should nominate one member to ascertain whether any factors could be shown to have an association with cancer at these sites and to name the factors.

The Working Party, provided in advance with a concise statement of the kind of statistical information available in each country, reached the conclusion<sup>19</sup> that in no single country did statistics of morbidity from cancer cover the whole population, nor were they sufficiently uniform or reliable to give any reasonable prospect of international comparison. This did not mean, however, that every effort should not be made to extend their coverage. It was decided in the meantime to limit discussion to statistics of mortality from cancer and to form a view on the extent to which differences in the national figures affected international comparisons. It was the view of the Working Party that, provided due allowance was made for local variations and technique, simple comparisons could be based on existing mortality figures.

The Working Party selected the following sites as the most profitable to investigate. In order of priority they were: lung and bronchus (ICD Nos.

162 and 163), stomach (151), oesophagus (150), large intestine (153) and rectum (154). It was also decided that the comparison should not be limited to any specific age range and that differences in classification and in the methods of coding death certificates would not materially affect the comparisons. Some thought would have to be given to the reliability of diagnosis as stated on death certificates and local estimates should be made of possible errors in certification. The Working Party also stressed the need to get regional or urban and rural figures. It was decided that the study should be made and Dr. Neurdenburg of the Netherlands was requested to undertake it.

#### **Public Health Committee**

Dr. Logan was present at the eighth meeting of the Public Health Committee, held in Edinburgh from the 7th to the 10th April, to present the report of the Working Party on Cancer Statistics.<sup>20</sup>

#### **Organization for European Economic Co-operation**

##### **Manpower Committee: Group of Demographic Experts**

When the Manpower Committee met at the end of April it decided that the time had come to review the estimates contained in 'Demographic Trends in Western Europe 1951-1971'<sup>21</sup>, to assess how far they had been useful and to consider whether the previous survey should be resumed or its scope enlarged.

Mr. Benjamin was one of the Group of demographic experts which met in Paris on the 18th and 19th June. The view of the Group, reported<sup>22</sup> to the Manpower Committee, was that a comparison of the estimates made during the survey of 1953-54 with actual trends showed that in most cases the projections had been too low in estimating both the reduction in mortality and the increase in fertility. It was also noted that certain countries were unable to take account of migration when making their projections. The outcome of discussion on this part of their terms of reference was that the estimates would need to be reviewed at fairly short intervals. The Group also agreed that changes which had taken place since the survey was made pointed to the desirability of a fresh assessment. Previous experience did, however, justify the preparation of fresh estimates on the basis of only one assumption in regard to mortality and fertility and not on three different assumptions as previously. This assumption should be 'the most reasonable' taking account of the factors appropriate to each country.

The Group prepared a draft questionnaire sent round later to member countries after the report of the Group, to which it was annexed, had been considered by the Manpower Committee in July when the proposals of the demographic experts were approved.

#### **International Union for the Scientific Study of Population**

##### **International Population Conference**

Vienna was the place chosen for an International Population Conference arranged by the Union. It took place from the 28th August to the 4th September and was attended by Mr. Benjamin. Among the 77 papers contri-

buted to the discussions was one by him on 'Recent Fertility Trends in England and Wales' and another on 'National Morbidity Statistics in England and Wales' presented by the General Register Office in the name of Dr. Logan.

It was unfortunate that no arrangements had been made to select the range of subjects to be discussed at the Conference because, in their absence, the papers contributed covered more ground than could be competently dealt with in the time available. Nevertheless, the Conference, a meeting of demographers, was able to take stock of recent and current developments in the techniques used for population studies and, in particular, made some headway on such difficult matters as statistics of internal migration and urban-rural classification.<sup>23</sup>

#### **International Union Against Cancer**

##### **Committee on Clinical Stage Classification**

The Committee met in Paris from the 16th to the 18th July. The meeting, in which Dr. Logan took part, formulated proposals, based on the results of a special enquiry, for improving the classification of tumours of the breast, of the bladder, of the larynx and of other sites according to clinical assessments of their stages of development.

##### **Preparation for the Eighth Revision of the International List**

Representatives of the World Health Organization, from both headquarters and the American Region, attended a meeting in Washington on 2nd and 3rd June at which Dr. Logan and Mr. Fraser Harris (Canada) met Dr. Moriyama of the National Office of Vital Statistics in the United States to take stock of preparations that were being made in Canada, the United States and the United Kingdom for the eighth revision of the International Classification of Diseases which is due to be completed under the auspices of the World Health Organization in 1965. The meeting revealed that proposals for revising certain sections of the Classification were well advanced and arrangements were made for fresh drafts prepared in one country to be tried out in others. Due emphasis was placed on the fact that the next revision, unlike the one made in 1955, would be a full-scale exercise which could only be accomplished if the World Health Organization realized the importance of providing adequate staff and resources.

##### **International Co-operation in Statistics of Cancer**

Representatives from Denmark, Finland, France and Norway were among those who, with Dr. Logan, met at the National Cancer Institute, Bethesda, Maryland on the 22nd and 23rd January at the invitation of their colleagues in the United States who wished to get an outside view on 'The Cancer End Results Evaluation Program' sponsored by the National Cancer Institute of the United States Public Health Service as the outcome of a decision taken at the Third US National Cancer Conference. As the result of discussion, which indicated that the meeting thought that the 'Program' was on the right lines, information was pooled on cancer registration methods and on the results obtained from follow-up procedure in several countries. Arrangements were made for a report to be drafted for presentation to the 1962 International Cancer Congress (to be held in the USSR).



Further work resulting from the meeting took the late Dr. Alan McKenzie of the General Register Office to Bethesda for some eight weeks from mid-April.

A further review of progress was made in Copenhagen on the 5th and 6th October at a meeting in which both Dr. Logan and Dr. McKenzie took part.

#### Visitors from Overseas

Fifty-four students and others from overseas were among those who visited the General Register Office during 1959. The countries from which they came were Australia, Borneo, Burma, Chile, Czechoslovakia, Denmark, Egypt, France, Federal Republic of Germany, Ghana, India, Iran, Iraq, Israel, Jamaica, Japan, Malaya, Malta, Mauritius, Netherlands, Nigeria, Norway, Pakistan, Poland, South Africa, Sweden, St. Helena, Thailand, Trinidad, the United States of America, Yugoslavia and Zanzibar. They were nearly all officials sent by other governments and most of them came by virtue of Fellowships awarded by the United Nations, the World Health Organization or the Colombo Plan.

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## THE REGISTRATION SERVICE

### Searches and certificates

Tables T1 and T2 show the growth in the registers of births, marriages and deaths since 1866 and the extent to which the registers and indexes at the General Register Office have been used in a series of years since then.

The number of searches paid for by members of the public in 1959, at 229 thousand, was higher than in 1958 while the number of searches undertaken for Government Departments, mainly to verify ages of applicants for retirement pensions, declined to 188 thousand. This continues the trend which was interrupted in 1956 by a temporary increase which was explained in the Commentary\* for that year. The number of certificates issued from the registers in 1959 increased to over 300 thousand.

### Re-registration of births of legitimated persons

If the parents of a child marry after the child's birth the marriage will in certain circumstances legitimate the child. In these cases the birth should be re-registered to show the child as a legitimate child of its parents. Under the Legitimacy Act, 1926, a child was not legitimated by the marriage of its parents if either of them was married to a third person when the child was born. The Legitimacy Act, 1959, which came into operation on 29th October 1959, removed this prohibition, and children to whom it had previously applied became legitimated persons on that date. The first effects of the new provisions are reflected in Table T3, in the figures for the December Quarter 1959. Although the new Act was in operation for only the last two months of 1959 the number of re-registrations during the last quarter of the year rose to 939: this represents an increase of 73 per cent over the corresponding quarter of 1958. The total number of births re-registered during 1959 was 2,905, compared with 2,636 in 1958.

### Adopted children

The number of entries in the Adopted Children Register are shown in Table T4 for each year since 1951 and for groups of years from 1927 to 1955 (the original provision for the register was made in 1926). From a peak of more than 21,000 entries in 1946, there was a drop to less than 13,000 in 1950. The figure of 14,109 in 1959 was the highest since 1949.

The Adoption Act, 1958, which came into operation on 1st April 1959, introduced provision for the High Court and the County Courts to make provisional adoption orders. These orders confer authority on a person not domiciled in Great Britain to take a child out of this country for adoption and 71 such orders were made in 1959.

Table T5 analyses adoptions by the sex, age and legitimacy of the child and shows the number of children who were adopted by one or both of their natural parents. Information about other degrees of relationship between adopter and child is no longer available from the simplified form of adoption order introduced under the Act of 1958. The table shows that in 34 per cent of all adoptions one or both of the adoptive parents were the natural parents of the child.

\*The Registrar General's Statistical Review for the year 1956, Part III, Commentary, p.269. H.M.S.O. London, price 16s. 6d. net.

## THE NATIONAL HEALTH SERVICE CENTRAL REGISTER

During the year 1959 (covering a 53 week period) the National Health Service Central Register (which is maintained by the General Register Office on an agency basis) received notifications of 1,536,922 persons who were reported as having registered with doctors for the first time. It was found from the register that 226,924 of these were already on doctor's lists.

The Central Register also notified Executive Councils of the names of 991,094 persons for removal from doctors' lists by reason of death (546,861), enlistment (118,336), embarkation (321,711), or becoming long-term patients in mental hospitals (4,186). It was not in fact possible for Executive Councils to remove from doctors' lists all the persons notified to them in this way, because, in many cases, there were insufficient identifying particulars. In addition, 1,434,128 persons were notified as having changed their doctor on removal from the area of one Executive Council to another.

Towards the end of the year an alphabetical index of adult persons in the National Health Service was completed at the Central Register and brought into use. The purpose of the index is to enable the Register to trace the National Health Service numbers of patients who, on acceptance by doctors, fail to produce their medical cards or quote their numbers correctly. In the course of the compilation of the index it was possible to identify cases in which a patient was registered with more than one doctor (usually in different areas) and cases in which the name of a patient on a doctor's list should have been removed earlier because of death, enlistment or embarkation. Approximately 54,000 cases in the first category and 32,000 in the second (almost wholly cases of death) were notified to Executive Councils in 1959, eliminating a measure of long-standing inflation of numbers on doctors' lists. These figures are not included in those in the previous paragraph.

## PARLIAMENTARY AND LOCAL GOVERNMENT ELECTORS

### Electoral Registers

As required by the Electoral Registers Act, 1949, and the Representation of the People Act, 1949, a local register of electors based on a canvass is prepared in the autumn of each year. This distinguishes between those who are:

- (a) parliamentary and local government electors by virtue of residence on the qualifying date;
- (b) local government electors with a non-resident qualification on the qualifying date by virtue of occupancy (as owner or tenant) of any rateable land or premises of not less than £10 rateable value per occupier.

There is also a service register for any member of the Armed Forces and other persons employed in the service of the Crown in a post outside the United Kingdom and for their wives if with them.

The qualifying date for inclusion on the register is 10th October in England and Wales and the registers must be used for elections held in the twelve months beginning on the 16th February of the following year.

A person not of full age on the qualifying date but who will be so on the following 15th June is to be included on the register though there is no entitlement to vote before the following 2nd October. Such persons are shown separately in Table CXXXIV below as "Young Electors". There are 258,688 "Young Electors" in the 1959 register of electors. By definition this group should include all persons (except aliens and others who are not entitled to be registered) who were aged between 20 years 4 months and 21 years on the qualifying date. It can be estimated that the total number of persons in this age-group in England and Wales is about 400,000. After allowing for those not entitled to be registered, the discrepancy between actual and potential registrations is substantial. It would appear that the main reason is probably that many householders, in completing the forms from which the register is compiled, either fail to appreciate that persons in this age-group should be included, or fail to indicate that they are not yet 21.

### Total electorate

The particulars recorded in Tables U and V for 1959 have been taken from statements sent to the Registrar General by the Electoral Registration Officers and Clerks to local authorities. They relate to the register which came into force on 16th February 1959.

Table U refers to parliamentary and Table V to local government electors and elections. Table CXXXIV shows a few summary figures for 1959 and earlier years.

Table CXXXIV. Parliamentary and local government electors, 1954 to 1959, England and Wales

Register (qualifying date in brackets)	Parliamentary Register				Local Government Register
	Total at qualifying date	Services Register (included in col. 2)	"Young Electors" (not included in cols. 2 and 3)		
			Total	Services (included in col. 4)	
1	2	3	4	5	6
1954 (20th Nov. 1953) ...	30,525,190	276,156	212,229	15,001	30,640,141
1955 (10th Oct. 1954) ...	30,590,931	285,376	242,907	19,578	30,707,251
1956 (10th Oct. 1955) ...	30,679,509	289,615	248,420	18,259	30,795,617
1957 (10th Oct. 1956) ...	30,737,369	295,084	243,793	22,593	30,855,871
1958 (10th Oct. 1957) ...	30,795,834	283,383	250,464	26,707	30,914,568
1959 (10th Oct. 1958) ...	30,850,124	274,628	258,688	24,129	30,969,488

The number of parliamentary electors in England and Wales consistently corresponds almost exactly with the estimated *total* population aged 21 and over, excluding aliens resident here and those categories of persons not qualified to vote. This indicates that the discrepancies in different constituencies, due mostly to time lags in adding names to the registers or removing them, largely cancel out when aggregated for England and Wales as a whole. The percentages which the total parliamentary electorate represented of the estimated *total* population in the years 1955 to 1959 were:

1955	1956	1957	1958	1959
68·6	68·4	68·2	68·1	67·8

The proportion of the *total* population included in the local government register was 68·06 per cent in 1959. This is a slightly higher proportion than that of the parliamentary register, on account of the inclusion of those local government electors who have non-resident qualifications. There are just over 119 thousand of these in England and Wales, the number increasing only by a few hundred each year.

### Size of parliamentary constituencies

Table CXXXV shows for 1956 and 1959 the distribution of parliamentary constituencies, classified into county and borough constituencies, by their number of parliamentary electors.

Table CXXXV. Total number of electors in parliamentary constituencies, distinguishing county and borough constituencies, 1956 and 1959, England and Wales

Total number of electors at qualifying date	Number of constituencies			
	1956		1959	
	County	Borough	County	Borough
Under 30,000	1	—	1	—
30,000—	1	—	1	1
35,000—	5	6	6	8
40,000—	21	13	19	14
45,000—	43	29	36	39
50,000—	56	72	54	77
55,000—	61	76	50	66
60,000—	38	48	42	45
65,000—	17	29	19	23
70,000—	5	22	15	22
75,000—	—	3	4	3
80,000 and over	—	1	1	1
<b>Total</b>	<b>248</b>	<b>299</b>	<b>248</b>	<b>299</b>

While the average number of electors in a parliamentary constituency has risen slightly from 56,087 in 1956 to 56,399 in 1959, it is interesting to note the increasingly closer approximation to each other of the average number of voters in county and borough constituencies:

Average number of electors in	1956	1958	1959
All parliamentary constituencies	56,087	56,300	56,399
County constituencies	54,448	55,545	56,060
Borough constituencies	57,446	56,926	56,680

The average number of electors in borough constituencies in 1956 was 2,998 in excess of that in county constituencies. By 1959 this difference had dropped to only 620, between a quarter and a fifth of the earlier figure. The distribution of constituencies by size shows a marked upward shift in the county constituencies; but in the borough constituencies there is no such pronounced trend.

#### Local government elections

The next elections for county councils will be held in 1961. An analysis of the 1958 elections appeared in the 1958 Commentary (pages 208-210), to which there is nothing to add. Opportunity was taken in the 1957 Commentary (pages 220-222) to discuss local council elections in urban areas and the survey was completed by a comparable treatment of rural areas in the 1958 Commentary (pages 210-213).

Table CXXXVI below again continues to show the percentage of the electorate voting since 1951 in the various types of local government elections, but calls for no particular comment at so short an interval from the detailed analyses.

Table CXXXVI. Local government elections. Percentage of electorate voting in contested elections, 1951 to 1959, England and Wales

District	1951	1952	1953	1954	1955	1956	1957	1958	1959
Administrative counties	—	43.2	—	—	36.5	—	—	33.3	—
County boroughs	44.4	49.9	45.2	42.8	43.8	37.6	40.0	40.3	41.0
Metropolitan boroughs, municipal boroughs and urban districts	45.9	50.9	46.8	45.7	45.0	39.4	44.1	42.9	42.1
Rural districts	45.2	52.0	47.3	47.1	48.2	41.3	45.2	46.2	42.1
<b>Total</b>	<b>45.1</b>	<b>48.0</b>	<b>46.2</b>	<b>44.3</b>	<b>41.6</b>	<b>38.7</b>	<b>42.2</b>	<b>38.6</b>	<b>41.6</b>

#### Central Index of Service Voters

During 1959 the Central Index of Service Voters (which is maintained by the General Register Office on an agency basis) received from Electoral Registration Officers 67,936 declarations by persons qualified to be included in the electoral registers as service voters. The categories of persons qualified as service voters are:

- (i) any person who is a member of H.M. Forces;
- (ii) any person employed in the service of the Crown in a post outside the United Kingdom;
- (iii) any woman who is the wife of a service voter and is residing outside the United Kingdom to be with her husband.

A further 13,106 declarations were received in respect of persons under the age of 21 years. The Central Index notified Electoral Registration Officers of 28,169 persons who had made declarations before reaching the age of 21 years but who, during 1959, attained that age. Altogether 96,105 new service voters were added to the electoral registers.

In the same period Electoral Registration Officers were notified of 89,648 names of persons whose declarations ceased to be in force, and 8,131 declarations by persons under full age were cancelled because they ceased to have a service qualification before attaining full age.

APPENDIX A  
FERTILITY BY YEAR OF MARRIAGE, 1920-1959  
Women married once only, England and Wales

1. Mean family size

Table 1 (a).—All marriage ages under 45

Mean family size

Calendar year of marriage	Marriage duration (exact years)																														Calendar year of marriage		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30	
1920-24	.04	.40	.70	.92	1.11	1.28	1.42	1.55	1.67	1.77	1.85	1.93	2.00	2.05	2.10	2.15	2.18	2.21	2.24	2.26	2.28	2.29	2.30	2.31	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	1920-24
1925	.04	.39	.66	.86	1.04	1.19	1.33	1.45	1.55	1.64	1.72	1.80	1.86	1.91	1.96	2.00	2.03	2.06	2.08	2.11	2.13	2.14	2.16	2.16	2.17	2.17	2.17	2.17	2.17	2.17	2.17	1925	
1926	.04	.38	.64	.84	1.01	1.16	1.30	1.41	1.51	1.60	1.68	1.75	1.81	1.86	1.91	1.95	1.99	2.02	2.05	2.07	2.10	2.11	2.12	2.13	2.14	2.14	2.14	2.14	2.14	2.14	2.14	1926	
1927	.04	.38	.63	.83	1.00	1.15	1.27	1.38	1.49	1.58	1.66	1.72	1.78	1.83	1.87	1.91	1.95	1.98	2.01	2.03	2.05	2.07	2.08	2.08	2.09	2.09	2.09	2.09	2.09	2.09	2.09	1927	
1928	.03	.35	.63	.82	.99	1.13	1.26	1.36	1.47	1.56	1.64	1.71	1.77	1.81	1.86	1.90	1.93	1.97	2.00	2.02	2.04	2.06	2.07	2.07	2.08	2.08	2.08	2.08	2.08	2.08	2.08	1928	
1929	.03	.37	.63	.82	.98	1.13	1.26	1.38	1.48	1.56	1.65	1.72	1.78	1.82	1.87	1.92	1.96	1.99	2.02	2.04	2.05	2.06	2.07	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	1929	
1930	.03	.36	.62	.82	.98	1.13	1.27	1.38	1.48	1.57	1.64	1.71	1.76	1.82	1.87	1.92	1.96	2.00	2.03	2.04	2.06	2.07	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	1930	
1931	.03	.36	.61	.79	.96	1.10	1.24	1.35	1.45	1.54	1.61	1.67	1.74	1.80	1.86	1.91	1.96	1.99	2.02	2.04	2.05	2.06	2.07	2.07	2.07	2.08	2.08	2.08	2.08	2.08	2.08	1931	
1932	.03	.36	.59	.78	.95	1.10	1.22	1.34	1.44	1.51	1.58	1.66	1.73	1.81	1.87	1.92	1.97	2.00	2.02	2.04	2.05	2.06	2.07	2.07	2.08	2.08	2.08	2.08	2.08	2.08	2.08	1932	
1933	.04	.35	.60	.78	.95	1.09	1.22	1.33	1.42	1.50	1.58	1.66	1.74	1.81	1.87	1.92	1.96	1.99	2.01	2.02	2.04	2.04	2.05	2.05	2.06	2.06	2.06	2.06	2.06	2.06	2.06	1933	
1934	.03	.34	.59	.77	.94	1.08	1.21	1.30	1.39	1.49	1.58	1.67	1.74	1.82	1.87	1.92	1.95	1.97	1.99	2.00	2.01	2.02	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	1934	
1935	.03	.33	.57	.76	.93	1.06	1.17	1.28	1.39	1.50	1.60	1.68	1.77	1.84	1.88	1.92	1.95	1.98	1.99	2.00	2.02	2.02	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	1935	
1936	.03	.32	.56	.75	.91	1.03	1.15	1.27	1.39	1.50	1.60	1.69	1.77	1.82	1.87	1.90	1.93	1.95	1.97	1.98	1.99	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1936	
1937	.03	.31	.55	.73	.87	.99	1.13	1.27	1.39	1.51	1.62	1.72	1.79	1.84	1.88	1.92	1.94	1.96	1.98	1.99	2.00	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	1937	
1938	.03	.32	.56	.73	.88	1.03	1.18	1.32	1.44	1.58	1.68	1.76	1.83	1.88	1.92	1.95	1.97	1.99	2.01	2.02	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	1938	
1939	.02	.25	.47	.65	.82	.99	1.14	1.29	1.44	1.57	1.66	1.74	1.80	1.86	1.90	1.93	1.95	1.98	1.99	2.01	2.02	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	1939	
1940	.02	.21	.43	.61	.79	.95	1.11	1.29	1.43	1.54	1.63	1.70	1.75	1.80	1.84	1.87	1.89	1.92	1.93	1.95	—	—	—	—	—	—	—	—	—	—	—	1940	
1941	.02	.21	.45	.64	.82	.99	1.18	1.35	1.47	1.57	1.66	1.72	1.78	1.83	1.87	1.90	1.93	1.95	1.97	—	—	—	—	—	—	—	—	—	—	—	—	1941	
1942	.02	.22	.46	.65	.84	1.05	1.24	1.38	1.50	1.60	1.69	1.75	1.81	1.86	1.90	1.94	1.97	1.99	—	—	—	—	—	—	—	—	—	—	—	—	—	1942	
1943	.03	.27	.53	.74	.96	1.16	1.33	1.46	1.58	1.66	1.75	1.81	1.87	1.91	1.95	1.99	2.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1943	
1944	.04	.29	.58	.83	1.05	1.24	1.39	1.52	1.62	1.71	1.79	1.85	1.91	1.95	1.99	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1944	
1945	.04	.28	.60	.86	1.06	1.24	1.39	1.51	1.62	1.71	1.79	1.85	1.91	1.95	2.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1945	
1946	.04	.33	.66	.89	1.09	1.25	1.40	1.53	1.64	1.73	1.80	1.87	1.93	1.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1946	
1947	.04	.34	.66	.88	1.08	1.25	1.40	1.53	1.64	1.73	1.81	1.88	1.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1947	
1948	.04	.34	.64	.86	1.05	1.23	1.39	1.52	1.63	1.72	1.81	1.88	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1948	
1949	.04	.33	.62	.84	1.04	1.22	1.38	1.51	1.63	1.72	1.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1949	
1950	.04	.35	.62	.85	1.06	1.25	1.42	1.58	1.71	1.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1950	
1951	.04	.31	.58	.79	.99	1.18	1.35	1.49	1.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1951	
1952	.04	.32	.58	.80	1.00	1.20	1.38	1.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1952	
1953	.04	.32	.58	.81	1.03	1.23	1.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1953	
1954	.04	.32	.58	.81	1.03	1.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1954	
1955	.04	.33	.60	.83	1.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1955	
1956	.04	.34	.61	.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1956	
1957	.04	.34	.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1957	
1958	.04	.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1958	
1959	.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1959	

Table 1 (b).—Marriage age under 20

Mean family size

Calendar year of marriage	Marriage duration (exact years)																														Calendar year of marriage	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30
1920-24	.03	.57	.91	1.19	1.43	1.65	1.85	2.03	2.21	2.36	2.50	2.64	2.77	2.88	2.98	3.08	3.17	3.25	3.33	3.40	3.46	3.51	3.56	3.59	3.62	3.65	3.66	3.67	3.67	3.67	3.67	1920-24
1925	.04	.58	.89	1.16	1.39	1.59	1.78	1.94	2.10	2.25	2.38	2.50	2.62	2.72	2.82	2.91	2.97	3.06	3.13	3.21	3.27	3.34	3.39	3.43	3.46	3.48	3.49	3.49	3.50	3.50	3.50	1925
1926	.04	.60	.91	1.17	1.38	1.58	1.76	1.91	2.06	2.20	2.34	2.48	2.59	2.70	2.79	2.88	2.96	3.04	3.12	3.19	3.26	3.33	3.37	3.41	3.43	3.44	3.45	3.46	3.46	3.46	3.46	1926
1927	.05	.63	.92	1.16	1.37	1.57	1.74	1.90	2.05	2.18	2.33	2.44	2.56	2.66	2.76	2.85	2.94	3.02	3.12	3.19	3.26	3.31	3.34	3.37	3.39	3.40	3.41	3.42	3.42	3.42	3.42	1927
1928	.04	.60	.94	1.18	1.42	1.60	1.77	1.93	2.09	2.22	2.36	2.47	2.58	2.68	2.79	2.88	2.98	3.07	3.16	3.25	3.31	3.36	3.40	3.43	3.44	3.46	3.47	3.47	3.47	3.47	3.48	1928
1929	.03	.65	.95	1.20	1.41	1.60	1.77	1.94	2.10	2.24	2.37	2.50	2.62	2.71	2.81	2.90	3.00	3.09	3.17	3.24	3.29	3.33	3.36	3.38	3.40	3.41	3.42	3.42	3.42	3.42	3.42	1929
1930	.03	.63	.96	1.20	1.42	1.61	1.80	1.97	2.12	2.25	2.38	2.50	2.60	2.71	2.81	2.92																

APPENDIX A—continued

Table 1 (c).—Marriage age 20-24

Mean family size

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Calendar year of marriage	Marriage duration (exact years)																														Calendar year of marriage		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30	
1920-24	.03	.44	.76	1.00	1.21	1.39	1.56	1.70	1.84	1.96	2.06	2.15	2.24	2.31	2.37	2.43	2.48	2.52	2.55	2.58	2.60	2.62	2.63	2.64	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	1920-24
1925	.03	.43	.73	.95	1.15	1.31	1.47	1.60	1.72	1.83	1.93	2.01	2.09	2.16	2.22	2.27	2.32	2.36	2.40	2.43	2.46	2.48	2.49	2.50	2.50	2.51	2.51	2.51	2.51	2.51	1925		
1926	.03	.42	.70	.92	1.11	1.28	1.43	1.56	1.68	1.79	1.88	1.97	2.04	2.11	2.16	2.22	2.27	2.32	2.36	2.39	2.42	2.44	2.46	2.47	2.47	2.48	2.48	2.48	2.48	2.48	1926		
1927	.03	.42	.70	.91	1.10	1.27	1.41	1.53	1.66	1.76	1.86	1.93	2.00	2.07	2.12	2.16	2.21	2.25	2.29	2.33	2.35	2.37	2.38	2.39	2.39	2.39	2.39	2.39	2.39	2.39	1927		
1928	.02	.38	.68	.89	1.08	1.24	1.38	1.50	1.62	1.73	1.82	1.91	1.98	2.04	2.09	2.14	2.19	2.24	2.28	2.30	2.33	2.34	2.35	2.36	2.36	2.36	2.36	2.36	2.36	2.36	1928		
1929	.02	.41	.70	.90	1.08	1.24	1.39	1.52	1.64	1.74	1.84	1.92	1.99	2.05	2.11	2.17	2.22	2.26	2.29	2.32	2.34	2.36	2.36	2.37	2.37	2.37	2.37	2.37	2.37	2.37	1929		
1930	.02	.39	.68	.88	1.07	1.23	1.38	1.51	1.62	1.72	1.81	1.88	1.95	2.02	2.08	2.15	2.20	2.24	2.28	2.30	2.32	2.33	2.34	2.35	2.35	2.35	2.35	2.35	2.35	2.35	1930		
1931	.02	.38	.66	.86	1.04	1.20	1.35	1.48	1.59	1.69	1.77	1.85	1.92	2.00	2.08	2.14	2.21	2.25	2.28	2.31	2.33	2.34	2.34	2.35	2.35	2.35	2.35	2.35	2.35	2.35	1931		
1932	.02	.38	.64	.84	1.02	1.19	1.33	1.46	1.57	1.66	1.74	1.83	1.92	2.01	2.09	2.16	2.21	2.25	2.28	2.30	2.31	2.32	2.33	2.34	2.34	2.34	2.34	2.34	2.34	2.34	1932		
1933	.03	.37	.64	.84	1.02	1.18	1.32	1.45	1.55	1.64	1.73	1.83	1.93	2.01	2.10	2.16	2.21	2.24	2.27	2.29	2.30	2.31	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	1933		
1934	.03	.37	.63	.84	1.02	1.18	1.31	1.42	1.52	1.64	1.75	1.85	1.94	2.03	2.10	2.15	2.19	2.22	2.25	2.26	2.28	2.29	2.29	2.30	2.30	2.30	2.30	2.30	2.30	2.30	1934		
1935	.02	.36	.62	.82	1.01	1.16	1.27	1.39	1.52	1.65	1.76	1.87	1.98	2.06	2.12	2.17	2.21	2.24	2.26	2.28	2.30	2.30	2.31	2.31	2.32	2.32	2.32	2.32	2.32	2.32	1935		
1936	.03	.35	.60	.80	.98	1.12	1.24	1.37	1.50	1.63	1.75	1.87	1.96	2.03	2.08	2.13	2.16	2.19	2.21	2.23	2.24	2.25	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	1936		
1937	.03	.33	.58	.78	.93	1.07	1.22	1.37	1.50	1.64	1.77	1.88	1.96	2.03	2.08	2.12	2.16	2.18	2.20	2.22	2.23	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	1937		
1938	.02	.32	.57	.75	.92	1.08	1.25	1.40	1.54	1.69	1.82	1.91	1.99	2.05	2.10	2.14	2.17	2.19	2.21	2.23	2.24	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	1938		
1939	.02	.24	.47	.66	.84	1.03	1.20	1.36	1.53	1.67	1.78	1.87	1.94	2.00	2.05	2.08	2.12	2.14	2.16	2.18	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	1939		
1940	.02	.20	.43	.62	.81	.98	1.16	1.35	1.51	1.63	1.73	1.81	1.87	1.92	1.97	2.00	2.03	2.06	2.08	2.10	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	1940		
1941	.02	.20	.44	.65	.84	1.02	1.23	1.42	1.55	1.66	1.76	1.83	1.89	1.95	1.99	2.03	2.06	2.09	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	1941		
1942	.02	.21	.47	.67	.86	1.09	1.29	1.44	1.58	1.69	1.78	1.85	1.92	1.97	2.02	2.06	2.09	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	1942		
1943	.02	.27	.55	.75	.99	1.20	1.38	1.53	1.65	1.75	1.84	1.91	1.97	2.02	2.06	2.10	2.14	2.17	2.19	2.21	2.23	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	1943		
1944	.04	.28	.58	.85	1.08	1.28	1.44	1.58	1.69	1.79	1.87	1.94	2.00	2.05	2.10	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	1944		
1945	.03	.27	.61	.88	1.09	1.28	1.43	1.56	1.67	1.77	1.85	1.92	1.98	2.04	2.08	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1945		
1946	.03	.33	.68	.92	1.13	1.31	1.47	1.61	1.73	1.82	1.91	1.98	2.04	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1946		
1947	.03	.34	.67	.90	1.10	1.28	1.45	1.58	1.70	1.80	1.88	1.96	2.03	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1947		
1948	.03	.33	.64	.86	1.07	1.25	1.42	1.55	1.67	1.78	1.87	1.94	2.00	2.06	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1948		
1949	.03	.32	.62	.84	1.04	1.23	1.40	1.54	1.66	1.76	1.86	1.94	2.00	2.05	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1949		
1950	.03	.32	.60	.83	1.05	1.25	1.43	1.59	1.73	1.85	1.95	2.03	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1950		
1951	.03	.28	.55	.76	.97	1.16	1.34	1.49	1.63	1.75	1.85	1.93	2.00	2.06	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1951		
1952	.03	.29	.56	.77	.98	1.18	1.37	1.53	1.67	1.79	1.89	1.97	2.04	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1952		
1953	.03	.28	.55	.77	.99	1.19	1.37	1.53	1.67	1.79	1.89	1.97	2.04	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1953		
1954	.03	.28	.54	.76	.99	1.20	1.39	1.55	1.69	1.81	1.91	1.99	2.06	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1954		
1955	.03	.29	.56	.79	1.02	1.23	1.41	1.57	1.71	1.83	1.93	2.01	2.08	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	1955		
1956	.03	.30	.57	.82	1.05	1.26	1.44	1.60	1.74	1.87	1.97	2.05	2.12	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	1956		
1957	.03	.30	.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1957			
1958	.03	.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1958			
1959	.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1959			

5107-17\*

Table 1 (d).—Marriage age 25-29

Mean family size

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Calendar year of marriage	Marriage duration (exact years)																														Calendar year of marriage
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
1920-24	.03	.33	.62	.82	1.00	1.15	1.28	1.39	1.49	1.58	1.65	1.70	1.75	1.78	1.81	1.84	1.85	1.86	1.87	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1920-24
1925	.03	.30	.56	.73	.89	1.03	1.15	1.26	1.35	1.42	1.48	1.54	1.58	1.62	1.64	1.66	1.68	1.68	1.69	1.69	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1925
1926	.03	.29	.54	.72	.88	1.01	1.13	1.23	1.32	1.39	1.45	1.51	1.55	1.58	1.60	1.62	1.64	1.65	1.66	1.66	1.66	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1926
1927	.02	.27	.50	.68	.83	.97	1.07	1.18	1.26	1.34	1.40	1.46	1.50	1.53	1.56	1.58	1.60	1.61	1.61	1.62	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1927
1928	.03	.27	.52	.70	.85	.98	1.10	1.19	1.27	1.35	1.41	1.46	1.50	1.53	1.56	1.															



APPENDIX A—continued  
2. Fertility rates

Table 2 (a).—All marriage ages under 45

Calendar year of marriage	Marriage duration (completed years)																														Calendar year of marriage		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30	
1920-24	.367	.297	.222	.189	.164	.146	.128	.118	.101	.087	.076	.065	.057	.050	.044	.037	.030	.026	.022	.018	.014	.010	.008	.005	.004	.002	.001	.000	.000	.000	.000	.000	1920-24
1925	.351	.274	.200	.178	.149	.140	.117	.105	.090	.080	.073	.062	.053	.044	.040	.032	.030	.027	.024	.019	.016	.012	.009	.004	.003	.001	.001	.000	.000	.000	.000	.000	1925
1926	.338	.265	.199	.170	.150	.133	.114	.097	.092	.080	.072	.058	.053	.045	.042	.037	.031	.031	.025	.022	.017	.013	.007	.005	.002	.002	.000	.000	.001	.000	.000	.000	1926
1927	.342	.256	.193	.170	.150	.126	.111	.104	.090	.079	.066	.061	.049	.041	.037	.036	.032	.031	.024	.019	.015	.009	.006	.004	.002	.001	.000	.001	.000	.000	.000	.000	1927
1928	.319	.276	.194	.168	.141	.126	.107	.103	.089	.080	.070	.059	.046	.044	.039	.038	.037	.030	.025	.018	.014	.009	.006	.003	.002	.001	.000	.001	.000	.000	.000	.000	1928
1929	.338	.260	.192	.162	.143	.133	.115	.100	.090	.082	.070	.058	.049	.047	.045	.040	.032	.029	.021	.016	.011	.007	.005	.003	.002	.001	.000	.000	.000	.000	.000	.000	1929
1930	.332	.263	.193	.167	.149	.134	.115	.102	.089	.073	.062	.058	.055	.053	.050	.041	.035	.027	.018	.015	.009	.007	.005	.003	.002	.001	.000	.001	.000	.000	.000	.000	1930
1931	.329	.250	.184	.166	.146	.133	.116	.101	.087	.068	.066	.063	.065	.056	.051	.049	.036	.025	.019	.014	.008	.006	.005	.003	.001	.002	.000	.001	.000	.000	.000	.000	1931
1932	.326	.239	.187	.165	.149	.128	.116	.097	.074	.074	.075	.074	.073	.061	.057	.045	.031	.025	.016	.012	.009	.007	.004	.003	.002	.001	.000	.000	.000	.000	.000	.000	1932
1933	.315	.249	.183	.163	.145	.130	.113	.082	.079	.083	.083	.079	.066	.066	.052	.038	.028	.020	.014	.011	.009	.006	.003	.003	.001	.001	.000	.000	.000	.000	.000	.000	1933
1934	.314	.244	.186	.166	.144	.125	.093	.089	.096	.097	.088	.073	.072	.057	.042	.032	.025	.018	.013	.011	.008	.005	.003	.003	.001	.001	.000	.000	.000	.000	.000	.000	1934
1935	.306	.240	.191	.168	.132	.108	.103	.111	.113	.095	.089	.084	.067	.050	.038	.030	.022	.017	.013	.011	.007	.005	.004	.002	.001	.000	.000	.000	.000	.000	.000	.000	1935
1936	.294	.237	.188	.161	.123	.115	.118	.121	.110	.100	.096	.076	.056	.044	.034	.025	.021	.018	.013	.009	.007	.006	.003	.001	.002	.000	.000	.000	.000	.000	.000	.000	1936
1937	.279	.239	.180	.137	.125	.139	.136	.122	.119	.116	.094	.068	.055	.042	.032	.026	.020	.017	.012	.010	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	.000	1937
1938	.291	.236	.169	.150	.151	.149	.139	.128	.134	.106	.079	.064	.053	.039	.030	.026	.020	.015	.013	.010	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	.000	1938
1939	.229	.217	.179	.171	.168	.154	.145	.157	.126	.094	.076	.064	.054	.038	.031	.026	.024	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	.000	1939
1940	.189	.215	.185	.176	.161	.164	.177	.145	.107	.086	.069	.053	.048	.038	.032	.027	.022	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	.000	1940
1941	.186	.236	.192	.178	.172	.194	.166	.124	.101	.084	.065	.056	.050	.038	.033	.028	.023	.020	.016	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	1941
1942	.196	.241	.192	.190	.207	.186	.147	.121	.099	.083	.067	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	1942
1943	.241	.259	.204	.222	.203	.165	.138	.112	.088	.081	.066	.055	.046	.041	.035	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	1943
1944	.246	.288	.255	.222	.183	.153	.130	.103	.088	.079	.063	.054	.048	.041	.036	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	1944
1945	.237	.322	.258	.204	.176	.150	.121	.107	.090	.078	.064	.057	.047	.042	.036	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	1945
1946	.283	.330	.234	.194	.168	.149	.125	.109	.091	.076	.066	.058	.049	.044	.038	.032	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	1946
1947	.301	.313	.227	.190	.171	.153	.128	.108	.093	.079	.072	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	1947
1948	.293	.298	.221	.197	.178	.157	.128	.111	.097	.085	.073	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	1948
1949	.290	.291	.213	.201	.182	.158	.134	.114	.099	.086	.073	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	.000	1949
1950	.303	.276	.224	.213	.191	.174	.152	.131	.111	.099	.086	.073	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	1950
1951	.267	.266	.214	.203	.186	.169	.147	.126	.111	.099	.086	.073	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	1951
1952	.273	.267	.214	.207	.195	.177	.151	.131	.111	.099	.086	.073	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	1952
1953	.274	.266	.226	.217	.204	.180	.158	.134	.114	.099	.086	.073	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	1953
1954	.275	.260	.230	.222	.208	.180	.158	.134	.114	.099	.086	.073	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	1954
1955	.286	.270	.237	.226	.211	.186	.160	.138	.118	.101	.086	.073	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	.000	1955
1956	.296	.277	.251	.241	.226	.201	.176	.154	.134	.114	.099	.086	.073	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	1956
1957	.298	.279	.251	.241	.226	.201	.176	.154	.134	.114	.099	.086	.073	.059	.049	.041	.034	.030	.026	.021	.018	.014	.011	.008	.005	.003	.001	.001	.000	.000	.000	.000	1957
1958	.320	.291	.263	.253	.238	.213	.188	.163	.143	.123	.103	.083	.063	.043	.023	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	1958

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Table 2 (b).—Marriage age under 20

Calendar year of marriage	Marriage duration (completed years)																														Calendar year of marriage	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30
1920-24	.535	.352	.280	.236	.219	.202	.177	.179	.156	.141	.139	.122	.115	.104	.100	.092	.079	.077	.067	.061	.050	.046	.037	.031	.022	.016	.008	.003	.001	.001	.000	1920-24
1925	.545	.307	.273	.230	.198	.193	.152	.162	.155	.126	.123	.120	.100	.084	.068	.086	.073	.075	.064	.064	.055	.041	.026	.017	.011	.006	.003	.002	.000	.000	.000	1925
1926	.556	.315	.256	.209	.199	.182	.156	.145	.146	.138	.133	.111	.110	.095	.090	.082	.077	.076	.072	.075	.063	.047	.032	.022	.015	.009	.004	.003	.002	.000	.000	1926
1927	.580	.295	.235	.213	.205	.169	.155	.152	.127	.149	.119	.112	.104	.098	.091	.093	.072	.101	.075	.067	.051	.036	.026	.018	.013	.009	.004	.003	.001	.001	.000	1927
1928	.564	.342	.240	.231	.186	.171	.154	.160	.136	.140	.112	.111	.099	.102	.099	.091	.096	.091	.085	.066	.050	.036	.026	.017	.012	.009	.005	.002	.001	.001	.000	1928
1929	.614	.307	.248	.211	.191	.170	.164	.160	.144	.130	.133	.119	.091	.100	.090	.091	.095	.084	.066	.050	.037	.030	.024	.015	.011	.008	.004	.002	.001	.000	.000	1929
1930	.596	.332	.241</																													



APPENDIX A—continued

Table 2 (c).—Marriage age 20-24

Fertility rates

Calendar year of marriage	Marriage duration (completed years)																														Calendar year of marriage		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30	
1920-24	.409	.319	.242	.206	.182	.165	.146	.135	.120	.105	.092	.080	.072	.064	.057	.049	.041	.034	.029	.024	.018	.012	.009	.006	.003	.001	.001	.000	.000	.000	.000	.000	1920-24
1925	.401	.297	.221	.198	.160	.164	.130	.121	.106	.097	.087	.077	.071	.055	.054	.046	.042	.038	.033	.027	.019	.014	.009	.005	.002	.001	.000	.000	.000	.000	.000	1925	
1926	.382	.289	.215	.190	.172	.151	.130	.112	.110	.095	.087	.073	.068	.057	.056	.049	.045	.045	.034	.028	.022	.015	.009	.005	.002	.002	.000	.000	.000	.000	.000	1926	
1927	.389	.280	.211	.192	.169	.143	.123	.123	.107	.092	.077	.072	.061	.051	.046	.047	.044	.040	.032	.024	.018	.011	.007	.004	.002	.001	.000	.000	.000	.000	.000	1927	
1928	.355	.301	.212	.184	.159	.142	.123	.121	.106	.093	.087	.072	.057	.054	.047	.050	.049	.038	.030	.022	.016	.011	.007	.004	.002	.001	.000	.000	.000	.000	.000	1928	
1929	.383	.287	.208	.176	.160	.149	.132	.115	.107	.099	.080	.068	.063	.056	.061	.052	.038	.035	.026	.020	.015	.008	.005	.003	.002	.000	.000	.000	.000	.000	.000	1929	
1930	.369	.288	.207	.182	.166	.147	.128	.112	.104	.083	.072	.071	.066	.068	.063	.055	.043	.033	.023	.018	.012	.007	.005	.003	.002	.001	.001	.000	.000	.000	.000	1930	
1931	.362	.279	.198	.179	.160	.150	.129	.115	.098	.080	.078	.075	.081	.073	.068	.062	.046	.032	.025	.017	.009	.007	.005	.002	.001	.001	.000	.000	.000	.000	.000	1931	
1932	.360	.260	.200	.182	.165	.142	.131	.112	.084	.085	.089	.087	.092	.077	.070	.054	.038	.029	.021	.014	.011	.007	.005	.002	.001	.001	.000	.000	.000	.000	.000	1932	
1933	.343	.272	.199	.176	.156	.145	.132	.096	.093	.093	.099	.095	.083	.084	.065	.047	.037	.026	.018	.014	.010	.007	.003	.002	.001	.001	.000	.000	.000	.000	.000	1933	
1934	.345	.265	.203	.184	.156	.138	.106	.103	.116	.114	.102	.089	.088	.069	.052	.040	.032	.024	.017	.014	.009	.006	.004	.002	.001	.001	.000	.000	.000	.000	.000	1934	
1935	.336	.263	.204	.186	.146	.115	.120	.130	.129	.111	.109	.105	.084	.062	.050	.039	.030	.023	.017	.014	.009	.006	.004	.002	.001	.001	.000	.000	.000	.000	.000	1935	
1936	.322	.252	.203	.174	.139	.125	.130	.134	.128	.120	.115	.092	.070	.055	.045	.033	.028	.023	.017	.012	.008	.006	.004	.002	.001	.001	.000	.000	.000	.000	.000	1936	
1937	.301	.258	.192	.154	.139	.149	.149	.132	.137	.134	.109	.082	.067	.054	.040	.032	.026	.021	.015	.012	.008	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1937	
1938	.298	.254	.179	.167	.164	.163	.153	.142	.153	.122	.093	.077	.066	.048	.037	.031	.026	.019	.015	.012	.008	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1938	
1939	.228	.226	.190	.186	.184	.168	.160	.175	.141	.106	.088	.074	.063	.044	.036	.031	.028	.021	.016	.012	.008	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1939	
1940	.189	.222	.192	.189	.175	.174	.197	.160	.119	.098	.079	.059	.055	.043	.037	.031	.026	.021	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1940	
1941	.179	.248	.205	.191	.184	.210	.181	.135	.111	.095	.071	.062	.057	.045	.039	.031	.027	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1941	
1942	.192	.258	.202	.197	.223	.199	.158	.133	.110	.092	.074	.064	.055	.045	.039	.033	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1942	
1943	.244	.280	.202	.236	.217	.176	.149	.123	.096	.088	.071	.060	.051	.046	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1943	
1944	.241	.303	.269	.234	.192	.163	.139	.112	.095	.085	.068	.059	.051	.046	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1944	
1945	.240	.336	.269	.213	.184	.159	.128	.112	.096	.084	.069	.062	.051	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1945	
1946	.297	.348	.246	.206	.180	.163	.135	.118	.099	.083	.073	.064	.056	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1946	
1947	.311	.326	.235	.199	.180	.162	.136	.117	.100	.086	.078	.066	.056	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1947	
1948	.297	.306	.227	.203	.185	.166	.135	.119	.105	.091	.078	.066	.056	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1948	
1949	.289	.298	.215	.206	.188	.166	.141	.122	.106	.091	.078	.066	.056	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1949	
1950	.290	.282	.224	.218	.200	.185	.161	.140	.118	.091	.078	.066	.056	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1950	
1951	.249	.267	.213	.207	.191	.177	.155	.134	.111	.091	.078	.066	.056	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1951	
1952	.253	.269	.212	.212	.202	.186	.159	.134	.111	.091	.078	.066	.056	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1952	
1953	.249	.264	.225	.222	.209	.189	.159	.134	.111	.091	.078	.066	.056	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1953	
1954	.249	.254	.228	.225	.214	.189	.159	.134	.111	.091	.078	.066	.056	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1954	
1955	.260	.264	.237	.229	.214	.189	.159	.134	.111	.091	.078	.066	.056	.045	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1955	
1956	.267	.270	.248	.237	.222	.197	.167	.142	.117	.097	.084	.072	.060	.048	.040	.034	.028	.022	.016	.011	.007	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	1956	
1957	.268	.272	.251	.241	.226	.201	.171	.146	.121	.101	.088	.076	.064	.052	.044	.038	.032	.026	.020	.014	.009	.006	.004	.002	.001	.001	.000	.000	.000	.000	.000	1957	
1958	.275	.278	.257	.247	.232	.207	.177	.152	.127	.107	.094	.082	.070	.058	.050	.044	.038	.032	.026	.020	.014	.009	.006	.004	.002	.001	.001	.000	.000	.000	.000	1958	

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Table 2 (d).—Marriage age 25-29

Fertility rates

Calendar year of marriage	Marriage duration (completed years)																														Calendar year of marriage		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30	
1920-24	.302	.285	.205	.175	.149	.130	.112	.102	.083	.070	.056	.047	.036	.030	.023	.016	.010	.007	.005	.003	.001	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	1920-24
1925	.263	.261	.173	.160	.143	.118	.114	.086	.072	.062	.060	.040	.032	.027	.019	.012	.008	.007	.004	.001	.003	.003	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	1925
1926	.254	.247	.190	.156	.128	.125	.100	.084	.071	.064	.053	.041	.029	.026	.020	.019	.008	.006	.005	.004	.005	.002	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	1926
1927	.244	.236	.178	.151	.132	.108	.105	.086	.077	.062	.051	.048	.031	.024	.021	.017	.011	.007	.006	.006	.004	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1927
1928	.238	.251	.180	.154	.132	.112	.093	.084	.074	.062	.054	.040	.030	.026	.021	.017	.012	.008	.008	.006	.003	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1928
1929	.233	.238	.181	.154	.132	.125	.097	.084	.069	.065	.055	.040	.033	.033	.022	.021	.014	.012	.007	.005	.003	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1929
1930	.245	.231	.182	.156	.136	.126	.104	.100	.078	.057	.046	.042	.040	.035	.026	.022	.016	.010	.007	.005	.001	.0											

Table 2 (e).—Marriage age 30-34

Fertility rates

Calendar year of marriage	Marriage duration (completed years)																														Calendar year of marriage			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30		
1920-24	.276	.244	.182	.152	.121	.103	.082	.068	.046	.036	.025	.021	.012	.007	.005	.004	.002	.002	.001	.001	.000	.000	.000										1920-24	
1925	.268	.238	.160	.144	.116	.083	.068	.063	.050	.032	.025	.019	.010	.005	.002	.002	.001	.001	.000	.001	.000	.000	.000										1925	
1926	.228	.207	.156	.121	.109	.072	.063	.057	.044	.021	.020	.008	.009	.007	.004	.002	.001	.001	.000	.001	.000	.000	.000										1926	
1927	.241	.221	.164	.130	.101	.082	.062	.055	.038	.031	.028	.015	.007	.002	.001	.000	.002	.001	.001	.000	.000	.000	.000										1927	
1928	.211	.222	.151	.114	.084	.082	.059	.054	.027	.031	.019	.010	.006	.005	.004	.002	.002	.002	.001	.001	.000	.000	.000										1928	
1929	.226	.208	.135	.119	.094	.081	.070	.047	.045	.031	.018	.016	.007	.001	.002	.001	.003	.002	.001	.000	.000	.000	.000										1929	
1930	.207	.220	.153	.118	.104	.076	.062	.044	.041	.028	.024	.015	.009	.005	.006	.004	.004	.002	.001	.000	.000	.000	.000										1930	
1931	.211	.186	.142	.122	.098	.073	.072	.049	.029	.026	.024	.016	.009	.007	.006	.006	.004	.002	.001	.000	.000	.000	.000										1931	
1932	.239	.188	.162	.130	.097	.082	.067	.056	.039	.027	.024	.023	.029	.008	.011	.009	.006	.003	.002	.001	.000	.000	.000										1932	
1933	.223	.196	.139	.135	.101	.091	.061	.049	.055	.035	.039	.023	.014	.012	.008	.005	.003	.001	.000	.000	.000	.000	.000										1933	
1934	.210	.194	.142	.123	.096	.078	.055	.048	.033	.038	.026	.019	.017	.012	.008	.005	.002	.000	.000	.000	.000	.000	.000										1934	
1935	.211	.206	.148	.117	.092	.076	.060	.067	.052	.036	.028	.023	.015	.010	.007	.002	.001	.000	.000	.000	.000	.000	.000										1935	
1936	.196	.189	.151	.117	.080	.074	.077	.075	.060	.042	.031	.022	.013	.008	.004	.001	.000	.000	.000	.000	.000	.000	.000										1936	
1937	.207	.200	.140	.098	.088	.090	.089	.073	.055	.042	.029	.029	.019	.012	.005	.002	.002	.000	.000	.000	.000	.000	.000										1937	
1938	.202	.207	.130	.116	.103	.115	.093	.061	.061	.042	.025	.017	.010	.005	.002	.002	.000	.000	.000	.000	.000	.000	.000										1938	
1939	.171	.184	.134	.122	.133	.113	.083	.085	.061	.037	.023	.014	.009	.004	.002	.001																	1939	
1940	.150	.189	.156	.133	.135	.113	.094	.071	.047	.029	.017	.012	.008	.004	.002	.001																	1940	
1941	.154	.215	.159	.130	.126	.118	.094	.063	.042	.028	.014	.011	.009	.003	.002	.001																	1941	
1942	.152	.198	.142	.160	.148	.121	.090	.063	.043	.029	.016	.012	.009	.004	.002	.001																	1942	
1943	.171	.202	.194	.172	.143	.111	.083	.057	.037	.028	.017	.013	.006	.004	.002	.001																	1943	
1944	.202	.248	.212	.170	.134	.105	.080	.052	.038	.027	.016	.011	.007	.004	.003																		1944	
1945	.188	.272	.205	.157	.129	.101	.071	.057	.039	.030	.019	.012	.007	.004																			1945	
1946	.194	.277	.190	.152	.122	.104	.077	.058	.041	.027	.019	.013	.007																				1946	
1947	.191	.263	.187	.149	.121	.101	.076	.056	.040	.027	.019	.012																					1947	
1948	.175	.247	.183	.153	.130	.105	.076	.058	.038	.030	.020																							1948
1949	.176	.243	.177	.160	.131	.109	.077	.062	.044	.029																								1949
1950	.230	.259	.190	.169	.144	.117	.087	.071	.050																									1950
1951	.207	.240	.174	.155	.137	.109	.084	.061																										1951
1952	.217	.245	.178	.163	.136	.114	.085																											1952
1953	.212	.243	.186	.157	.141	.107																												1953
1954	.218	.229	.191	.164	.142																													1954
1955	.234	.237	.198	.162																														1955
1956	.250	.247	.212																															1956
1957	.243	.250																																1957
1958	.247																																	1958

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Table 2 (f).—Marriage age 35-39

Table 2 (g).—Marriage age 40-44

Fertility rates

Calendar year of marriage	Marriage duration (completed years)															Marriage duration (completed years)															Calendar year of marriage	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	0	1	2	3	4	5	6	7	8	9	10	11	12	13		14
1920-24	.213	.176	.108	.092	.062	.041	.029	.021	.015	.007	.007	.003	.002	.002	.000	.001	.117	.058	.029	.023	.015	.010	.006	.011	.006	.003	.003	.005	.003	.002	.001	1920-24
1925	.216	.141	.108	.066	.047	.036	.031	.023	.008	.009	.008	.001	.002	.001	.002	.001	.048	.056	.029	.017	.002	.007	.012	.000	.000	.000	.006	.000	.000	.003	.000	1925
1926	.199	.142	.083	.061	.031	.030	.026	.015	.007	.009	.008	.002	.005	.003	.003	.001	.109	.034	.028	.013	.008	.004	.007	.006	.003	.013	.006	.000	.003	.004	.000	1926
1927	.208	.124	.088	.059	.038	.029	.019	.012	.010	.007	.001	.003	.000	.002	.003	.001	.107	.030	.008	.005	.007	.004	.002	.011	.006	.007	.004	.000	.000	.000	.000	1927
1928	.182	.131	.089	.064	.025	.034	.013	.008	.010	.008	.003	.003	.004	.002	.001	.000	.065	.037	.012	.010	.005	.002	.003	.000	.006	.000	.004	.003	.000	.003	.000	1928
1929	.177	.118	.094	.047	.038	.017	.027	.017	.003	.004	.008	.003	.002	.004	.000	.000	.106	.020	.009	.007	.006	.000	.001	.006	.006	.000	.003	.000	.002	.003	.000	1929
1930	.160	.156	.092	.078	.045	.039	.014	.007	.010	.003	.001	.002	.000	.000	.000	.000	.108	.038	.023	.009	.009	.010	.004	.003	.000	.000	.000	.000	.000	.000	.000	1930
1931	.187	.125	.082	.065	.067	.033	.016	.011	.008	.007	.000	.001	.000	.002	.000	.000	.087	.013	.015	.005	.000	.004	.000	.000	.004	.004	.003	.000	.000	.000	.000	1931
1932	.160	.131	.085	.041	.045	.030	.018	.015	.004	.005	.000	.000	.000	.001	.001	.000	.109	.007	.007	.004	.005	.001	.007	.000	.004	.003	.004	.000	.000	.000	.000	1932
1933	.178	.140	.076	.043	.037	.032	.010	.013	.001	.005	.001	.002	.002	.001	.001	.000	.097	.006	.003	.006	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	1933
1934	.180	.143	.086	.059	.041	.031	.021	.003	.002	.005	.002	.003	.002	.002	.000	.000	.114	.038	.020	.014	.002	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	1934
1935	.136	.107	.072	.057	.029	.029	.011	.016	.007	.002	.001	.002	.002	.001	.001	.000	.078	.010	.009	.006	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1935
1936	.166	.137	.085	.067	.041	.027	.032	.013	.013	.006	.004	.002	.002	.001	.000	.000	.061	.029	.014	.005	.010	.001	.002	.003	.002	.000	.000	.000	.000	.000	.000	1936
1937	.134	.134	.094	.044	.030	.024	.024	.028	.010	.005	.004	.002	.001	.000	.000	.000																



APPENDIX C

AGE FERTILITY RATES IN REGIONS, CONURBATIONS AND URBAN/RURAL AGGREGATES, 1959

Table 1. All live births per 1,000 women

Area	Age of mother at maternity						
	15-44	15-	20-	25-	30-	35-	40-44
ENGLAND AND WALES...	83.0	31.6	160.3	163.8	94.7	44.1	13.2
Regions and conurbations:							
Northern ...	91.7	28.7	167.9	178.3	105.5	53.9	16.3
Tyneside Conurbation ...	90.8	27.3	164.5	177.6	102.9	54.7	15.9
Remainder of Northern ...	92.0	29.2	169.1	178.5	106.6	53.6	16.5
East and West Ridings ...	82.7	31.3	167.2	163.4	91.4	42.0	12.4
West Yorkshire Conurbation ...	82.2	32.2	166.7	166.3	92.2	39.1	11.0
Remainder of East and West Ridings...	83.1	30.8	167.5	161.5	90.8	44.0	13.4
North Western ...	85.8	32.7	167.0	167.9	98.8	47.8	13.8
South East Lancashire Conurbation...	84.1	35.9	172.1	161.4	94.3	44.5	12.4
Merseyside Conurbation ...	94.7	30.8	173.9	182.0	113.1	56.3	18.4
Remainder of North Western ...	82.4	31.1	158.2	166.0	95.2	46.4	12.9
North Midland ...	86.4	32.7	170.3	167.5	96.2	45.8	13.3
Midland ...	83.1	31.4	154.9	157.3	95.5	47.1	15.4
West Midlands Conurbation ...	81.4	31.4	149.8	150.4	94.2	47.0	16.0
Remainder of Midland ...	85.0	31.4	160.3	164.5	96.9	47.2	14.8
Eastern ...	88.1	33.0	167.1	180.4	102.4	43.7	13.2
London and South Eastern ...	74.6	30.7	142.6	150.4	86.8	37.9	11.4
Greater London Conurbation ...	73.4	31.8	139.8	144.4	84.8	37.0	11.3
Remainder of London and South Eastern ...	78.6	27.5	151.9	171.2	93.4	40.6	11.6
Southern ...	90.8	34.4	181.1	185.1	100.4	44.9	13.8
South Western ...	83.2	30.4	165.4	168.3	93.9	43.1	12.4
Wales (including Monmouthshire) ...	82.1	32.8	159.5	152.5	92.5	48.7	14.1
Wales I (South East) ...	82.2	34.2	163.4	149.5	89.3	47.8	13.6
Wales II (remainder) ...	81.9	28.9	149.0	161.2	101.3	50.9	15.4
Urban/Rural aggregates:							
Conurbations ...	79.5	32.0	152.4	154.4	91.3	41.9	12.8
Areas outside conurbations:							
Urban areas with populations of 100,000 and over ...	83.0	34.0	165.9	156.2	90.8	44.6	12.8
Urban areas with populations of 50,000 and under 100,000 ...	82.2	33.5	161.7	157.4	90.7	44.3	13.2
Urban areas with populations under 50,000 ...	85.2	31.2	165.5	171.6	97.3	45.2	13.1
Rural districts ...	87.9	29.1	166.3	182.6	103.1	46.9	14.4

APPENDIX C—continued

Table 2. Legitimate live births per 1,000 married women

Area	Age of mother at maternity						
	15-44	15-	20-	25-	30-	35-	40-44
ENGLAND AND WALES ...	114.7	428.0	267.7	191.0	102.9	48.1	14.3
Regions and conurbations:							
Northern ...	129.8	475.0	284.0	205.9	114.3	58.8	17.7
Tyneside Conurbation ...	129.3	506.4	287.2	206.0	112.6	60.3	17.1
Remainder of Northern ...	130.0	465.0	282.9	205.9	115.0	58.2	17.9
East and West Ridings ...	111.8	413.8	261.6	184.1	97.2	44.7	13.0
West Yorkshire Conurbation ...	110.9	440.3	264.9	189.1	98.5	41.6	11.8
Remainder of East and West Ridings...	112.3	398.6	259.5	180.9	96.3	46.8	13.8
North Western ...	120.2	503.8	288.9	197.2	108.1	52.5	15.2
South East Lancashire Conurbation...	113.6	492.2	281.3	185.0	101.2	47.9	13.3
Merseyside Conurbation ...	142.2	538.8	332.1	222.7	126.8	63.3	20.8
Remainder of North Western ...	115.1	497.7	272.5	195.0	104.6	51.4	14.3
North Midland ...	115.1	360.7	260.6	187.4	101.4	48.4	14.1
Midland ...	113.2	433.7	252.6	180.2	102.3	50.6	16.5
West Midlands Conurbation ...	110.2	441.6	247.0	171.0	100.5	50.4	17.2
Remainder of Midland ...	116.2	426.2	258.3	189.7	104.3	50.8	15.8
Eastern ...	121.0	426.6	273.3	211.1	111.3	47.5	14.3
London and South Eastern ...	103.3	409.0	247.5	180.2	95.7	41.9	12.5
Greater London Conurbation ...	100.6	415.6	243.2	172.6	93.4	40.8	12.3
Remainder of London and South Eastern ...	111.9	390.0	261.7	205.8	103.3	45.5	13.1
Southern ...	126.0	396.2	295.8	215.9	109.6	49.2	15.0
South Western ...	116.7	409.4	280.3	196.9	102.8	47.6	13.7
Wales (including Monmouthshire) ...	116.8	469.1	276.5	180.0	101.8	53.7	15.5
Wales I (South East) ...	115.1	463.8	273.2	173.4	97.7	52.2	14.9
Wales II (remainder) ...	121.7	487.5	287.0	201.0	114.0	57.9	17.3
Urban/Rural aggregates:							
Conurbations ...	109.5	446.8	260.9	181.5	99.6	45.8	13.9
Areas outside conurbations:							
Urban areas with populations of 100,000 and over ...	112.7	434.4	265.4	176.9	96.8	47.9	13.7
Urban areas with populations of 50,000 and under 100,000 ...	113.3	453.6	263.4	182.1	97.9	48.3	14.3
Urban areas with populations under 50,000 ...	118.1	415.7	270.2	199.1	105.7	49.4	14.4
Rural districts ...	123.5	394.6	282.1	215.0	113.0	51.5	15.7

APPENDIX C—continued

Table 3. Illegitimate live births per 1,000 single, widowed and divorced women

Area	Age of mother at maternity						
	15-44	15-	20-	25-	30-	35-	40-44
ENGLAND AND WALES ... ..	13.48	5.83	19.69	31.26	30.82	16.94	6.10
Regions and conurbations:							
Northern ... ..	11.51	4.57	15.53	30.37	30.45	17.91	7.17
Tyneside Conurbation ... ..	11.46	3.88	14.85	34.04	25.88	17.62	8.86
Remainder of Northern ... ..	11.53	4.82	15.80	28.88	32.44	18.04	6.47
East and West Ridings ... ..	13.74	4.83	20.39	37.72	37.46	20.60	7.99
West Yorkshire Conurbation ... ..	15.73	5.13	23.76	42.47	40.34	22.12	5.97
Remainder of East and West Ridings... ..	12.37	4.64	18.01	33.98	35.20	19.29	9.77
North Western ... ..	13.10	5.62	18.99	30.08	29.80	17.16	5.86
South East Lancashire Conurbation... ..	16.76	6.53	25.08	39.84	40.00	21.69	7.37
Merseyside Conurbation ... ..	11.84	5.75	16.38	24.52	25.40	15.95	6.18
Remainder of North Western ... ..	10.64	4.71	15.42	25.07	23.37	13.70	4.21
North Midland ... ..	14.92	5.87	21.23	38.20	44.11	23.73	7.73
Midland ... ..	13.54	5.58	18.66	33.28	34.21	19.80	7.24
West Midlands Conurbation ... ..	14.98	6.13	20.42	38.43	37.74	20.29	7.47
Remainder of Midland ... ..	12.05	5.02	16.71	27.95	30.50	19.31	6.99
Eastern ... ..	12.55	6.24	18.74	24.73	28.73	15.83	5.25
London and South Eastern ... ..	15.33	7.02	23.14	32.67	29.69	15.12	5.54
Greater London Conurbation ... ..	16.57	7.60	24.73	34.80	30.75	15.77	6.14
Remainder of London and South Eastern ... ..	11.39	5.36	17.49	24.80	25.93	13.00	3.66
Southern ... ..	14.40	6.75	21.76	33.60	30.50	16.79	6.38
South Western ... ..	11.39	5.46	16.02	27.77	25.58	13.58	4.66
Wales (including Monmouthshire) ... ..	9.30	4.37	13.65	19.36	20.20	13.39	4.77
Wales I (South East) ... ..	8.95	4.05	13.20	19.26	20.00	14.32	4.72
Wales II (remainder) ... ..	10.12	5.22	14.64	19.57	20.65	11.50	4.86
Urban/Rural aggregates:							
Conurbations ... ..	15.60	6.61	22.78	35.47	32.81	17.69	6.56
Areas outside conurbations:							
Urban areas with populations of 100,000 and over ... ..	15.72	6.24	23.24	40.53	39.56	20.84	7.33
Urban areas with populations of 50,000 and under 100,000 ... ..	13.30	5.51	19.57	30.89	32.54	17.09	6.78
Urban areas with populations under 50,000 ... ..	11.08	4.99	16.48	25.20	26.49	15.57	4.58
Rural districts ... ..	10.37	5.17	14.12	22.47	24.58	13.99	5.66

APPENDIX D

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## APPENDIX E

### BOOKS AND ARTICLES BY OFFICERS OF THE GENERAL REGISTER OFFICE PUBLISHED DURING 1959

- BENJAMIN, B. . . . Actuarial aspects of human lifespans. *Ciba Foundation symposium on the lifespan of animals*. pp. 2-15.
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- LOGAN, W. P. D. . . . The epidemiology of the middle age group in the community. *CENTRAL COUNCIL FOR HEALTH EDUCATION. Seminar on the promotion of health in middle age*. pp. 2-5.

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