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The Office for National Statistics (ONS) is the Government Agency responsible for compiling, analysing and disseminating many of the United Kingdom's economic, social and demographic statistics, including the retail prices index, trade figures and labour market data, as well as the periodic census of the population and health statistics. The Director of ONS is also the National Statistician and the Registrar General for England and Wales, and the agency administers the statutory registration of births, marriages and deaths there.

## About Health Statistics Quarterly and Population Trends

*Health Statistics Quarterly* and *Population Trends* are journals of the Office for National Statistics. Each is published four times a year in February, May, August and November and March, June, September and December, respectively. In addition to bringing together articles on a wide range of population and health topics, *Health Statistics Quarterly* and *Population Trends* contain regular series of tables on a wide range of subjects for which ONS is responsible, including the most recently available statistics.

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Title \ Issue	Spring	Summer	Autumn	Winter
<i>Health Statistics Quarterly</i>	by 11 Sept	by 11 Dec	by 22 Mar	by 21 June
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# Health statistics

Quarterly

Summer 2001

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# in brief

## Health Accounts for the United Kingdom

**Health Accounts provide a framework which permits improved analyses of the efficiency and effectiveness of health services and allows us to understand the whole process of health care provision. Health outputs and outcomes can be linked with the various inputs (numbers of beds, doctors, nurses, and other professions associated with medicine...), throughputs (number of operations performed, beds occupied, hospital episodes, GP consultations...) and systems in place (types of provider, sources of funding...).**

A framework of coherent, consistent and integrated accounts based on internationally agreed concepts, definitions, classifications and accounting rules has been developed by the Organisation for Economic Co-operation and Development (OECD) in consultation with member states and the World Health Organisation, and is set out in the OECD publication *A System of Health Accounts*.

Comparison with other countries' health care systems can be a powerful tool for judging the performance of our own system. The use of the OECD's framework in the compilation of UK Health Accounts will allow more meaningful comparison to be made across countries, as well as over time. The need for comparison was highlighted by a promise in January 2000 by the Prime Minister to bring spending on health in the United Kingdom up to the European Union average.

Compiling Health Accounts will bring further benefits. For example, by investigating information which could feed into the accounts we will pull together and maintain descriptive information about health care provision in the United Kingdom, along with guidance on how this information should be used. The existence

of UK Health Accounts will help to promote a consistent treatment of such information, for example, price indices, employment, income redistribution and international trade.

### Compilation of Health Accounts in the United Kingdom

UK Health Accounts will be compiled according to the OECD's manual *A System of Health Accounts*. Most information to be fed into this framework already exists including, for example, expenditure by the health departments of constituent United Kingdom countries, health employment, sources of funding, registers of nursing homes, use of health services, prescribing, outcomes, and so on. There is also a substantial amount of information on health status of the population and on determinants of health.

Much of the relevant information is provided to the OECD for publication in their annual Health database, which contains information for 29 countries. However, the United Kingdom information supplied is not always available on a basis which allows the compilation of coherent and consistent figures for the United Kingdom as a whole. The NHS

in each of the constituent countries of the United Kingdom account for their information in different ways, thus resulting in series for Great Britain or England only. The Health Accounts will bring together information on health care provision in the whole of the United Kingdom, including wherever possible the same information from all constituent countries and from both the public and the private sectors.

'Continuity of care' means that there is an inability to distinguish between expenditure on health and on social protection. The Health Accounts will provide the framework to help resolve this.

### Where do we go from here?

The first stage in the production of UK Health Accounts will focus on the expenditure on health already appearing in National Accounts, along with price indices, international trade, and employment, as recommended by the OECD.

In a later stage, further information will be brought into the framework to allow analysis of other aspects of health care provision in the United Kingdom, and to allow study of the linkage between outcomes, throughputs and inputs. One important step in this later stage will be the investigation of expenditure on health outside the usual National Accounts boundary: occupational health (also known as intermediate consumption of health in the corporate sector) and household production of health services. Other important steps will be the consideration of how more non-expenditure variables should fit into the accounts.

The Office for National Statistics (ONS) proposes that a Project Board is set up to steer the development work on UK Health Accounts and to ensure adequate consultation of users' wants and needs. It will be very useful to have

people from a variety of backgrounds. ONS would be pleased to accept nominations for members of the Board and it is hoped that the Board can meet for the first time in late Spring 2001.

ONS would welcome any comments on this work, and invites readers to contact the Project Manager, Phillip Lee by e-mail at [phillip.lee@ons.gov.uk](mailto:phillip.lee@ons.gov.uk) or by post at Office for National Statistics, Room D4/19, 1 Drummond Gate, London, SW1V 2QQ.

## Improvements to the calculation of abortion statistics

This edition contains an article by Vera Ruddock and Lesz Lancucki examining the arguments for two improvements to National Statistics on abortions performed in England and Wales.

The first improvement is to remove current inconsistencies between birth, conception and abortion statistics in the populations used to calculate age-specific rates.

The second improvement is to publish an age-standardised abortion rate for England and Wales in addition to the overall abortion rate. As abortion rates are higher for women aged 17–25 than older women, trends in the overall abortion rate can be misleading at times when the proportion of women in the peak age range 17–25 is changing. An age-standardised rate takes account of changes in the population distribution of women at risk of having an abortion. The rate is standardised using the European Standard Population which is also used to produce age-standardised National Statistics for cancer incidence, cancer mortality and cause specific mortality in England and Wales.

It has been decided by the Department of Health, the Office for National Statistics and the National Assembly for Wales that these changes will be implemented. They will appear first in *Health Statistics Quarterly* 11 to be published in August 2001.

In addition to the two improvements a change will be made in the calculation of quarterly abortion rates. In future the mid-quarter population estimates, used to calculate these rates, will be produced by linear interpolation. Full details of these calculations will be presented in *Health Statistics Quarterly* 11.

Table 4.2 in *Health Statistics Quarterly* 11 will contain age-specific rates calculated on the new basis, an age-standardised abortion rate and the quarterly rates will be calculated using the above population estimates. The new headline National Statistic on abortion will be the age-standardised abortion rate.

Full details of the changes, including back series, will also be published in *Abortion Statistics 2000*, Series AB No. 27 in September 2001.

## Recent Publications

**Annual Abstract of Statistics 2001** (*The Stationery Office, £39.50, January, ISBN 0 11 621396 5*)

**Social Trends 31** (*The Stationery Office, £39.50, January, ISBN 0 11 621384 1*)

**Cancer Trends in England and Wales** (*The Stationery Office, £55, February, ISBN 0 11 621393 0*)

**Population Trends 103** (*The Stationery Office, £20, March, ISBN 0 11 621291-8*)

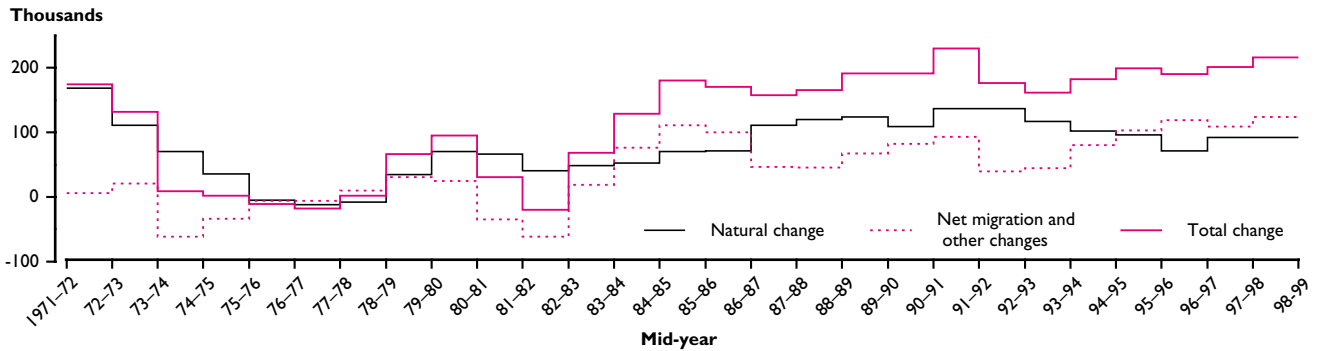
**National Statistics Work Programme** (*Office for National Statistics, Free, April, ISBN 1 85774 440 3*)

**Psychiatric Morbidity among Women Prisoners in England and Wales** (*Office for National Statistics, £15, April, ISBN 1 85774 442 X*)

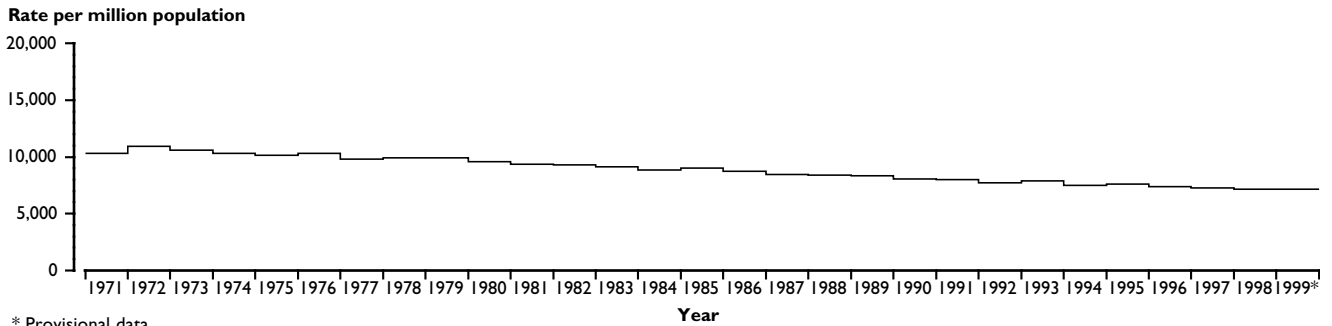
# Health indicators

England and Wales

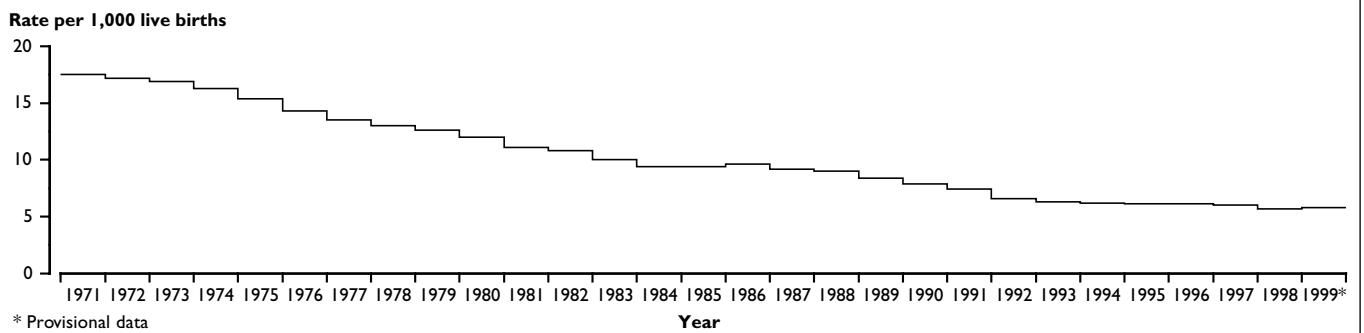
**Figure A** Population change (mid-year to mid-year)



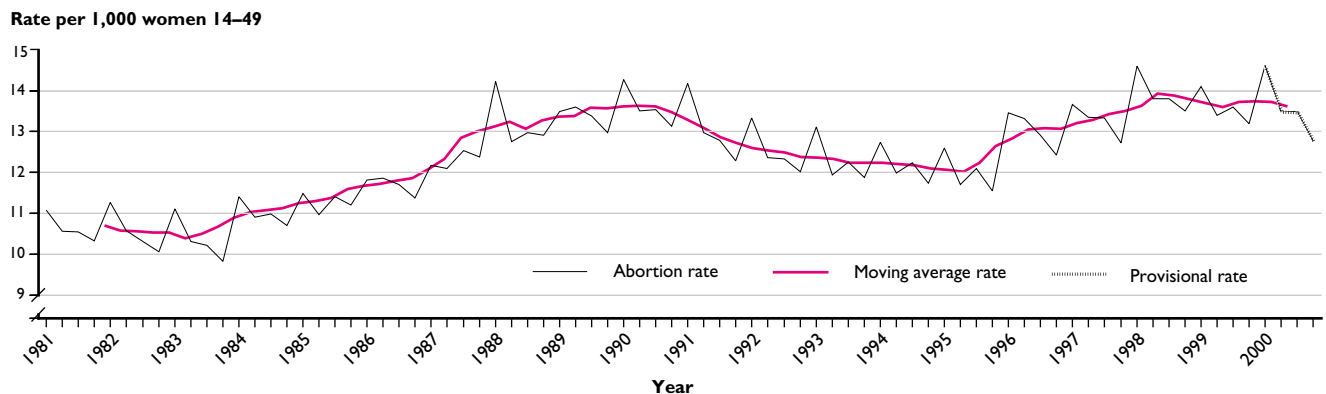
**Figure B** Age-standardised mortality rate



**Figure C** Infant mortality (under 1 year)



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# Trends in neural tube defects

Bev Botting,  
Office for National Statistics

## BACKGROUND

The neural tube is a narrow sheath that folds and closes between the 3rd and 4th weeks of pregnancy to form the brain and spinal cord of the embryo. Neural tube defects (NTDs) are congenital anomalies involving incomplete development of the brain, spinal cord, and/or their protective coverings. NTDs include anencephaly, iniencephaly, encephalocele and spina bifida (ICD9 codes 740-742.0, ICD10 codes Q00, Q01 and Q05). All cases of NTDs have been included in this analysis irrespective of whether they occur in combination with other anomalies or as part of a syndrome.

Anencephaly occurs when the 'cephalic' or head end of the neural tube fails to close, resulting in the absence of a major portion of the brain, skull, and scalp. Infants with this disorder are born without both a forebrain (the front part of the brain) and a cerebrum (the thinking and coordinating area of the brain). The remaining brain tissue is often exposed—not covered by bone or skin. The infant is usually blind, deaf, unconscious, and unable to feel pain. Although some individuals with anencephaly may be born with a rudimentary brain stem, the lack of a functioning cerebrum permanently rules out the possibility of ever gaining consciousness. Hence, children with anencephaly are either stillborn or die shortly after birth. This condition can be detected by prenatal diagnosis with high accuracy either by ultrasound or by measuring the levels of alpha-fetoprotein (AFP) in maternal blood or in amniotic fluid.<sup>2</sup>

Spina bifida is another NTD caused by the failure of the fetus's spine to close properly during the first month of pregnancy. Infants born with spina bifida sometimes have an open lesion on their spine where significant damage to the nerves and spinal cord has occurred.

There has been considerable interest in neural tube defects over the past decade following the MRC Vitamin trial reported in 1991 which showed that folic acid supplementation could help prevent these defects.<sup>1</sup> In principle the National Congenital Anomaly System (NCAS) should be able to monitor the impact of such policies. However, it is known that reporting to NCAS is incomplete. To improve levels of notification, NCAS has recently started electronic data exchange with some of the regional congenital anomaly registers. This article examines trends in neural tube defects in England and Wales from 1968–99 using notification data from the NCAS. It also discusses the possible impact on these trends of data exchange with regional registers, awareness and use of folic acid supplementation, changes in prenatal screening techniques and assisted conception techniques. It shows that the decline in rates of neural tube defects predated public and professional knowledge about the benefits of folic acid supplementation.

Although the spinal opening can be surgically repaired shortly after birth, the nerve damage is permanent, resulting in varying degrees of paralysis of the lower limbs. Even when there is no lesion present, there may be improperly formed or missing vertebrae and accompanying nerve damage. In addition to physical and mobility problems, many children with spina bifida have some form of learning disability. The three most common types of spina bifida are: myelomeningocele, the severest form, in which the spinal cord and its protective covering (the meninges) protrude from an opening in the spine; meningocele, in which the spinal cord develops normally but the meninges protrude from a spinal opening; and occulta, the mildest form, in which one or more vertebrae are malformed and covered by a layer of skin. Spina bifida may also cause bowel and bladder complications, and many children with spina bifida have hydrocephalus (excessive accumulation of cerebrospinal fluid in the brain). Infants with spina bifida can be operated on and usually survive. Spina bifida may occur with chromosomal anomalies such as Trisomy 18, and various factors are thought to contribute including maternal use of specific drugs (e.g. valproic acid) and folic acid deficiency.<sup>2</sup>

Encephalocele is the third, and least common, type of neural tube defect. It is an NTD in which parts of the brain protrude outside the skull in a sac of skin. Children who suffer from encephalocele usually live. Often their mental capacities do not develop normally, but the degree of mental disability depends upon the size and extent of the brain involvement. Encephalocele is often combined with other anomalies, including hydrocephaly, microcephaly and renal anomalies. Small and moderate encephaloceles can be operated on successfully. Some encephaloceles occur in hereditary syndromes with a high recurrence risk.<sup>2</sup>

## DATA SOURCES

Three separate data sources held by ONS are brought together here to examine trends in NTDs: the civil registration of live and stillbirths and of deaths carried out by Registrars of Births and Deaths, the National Congenital Anomaly System (NCAS), and the notifications to the Chief Medical Officers in England and Wales following terminations of pregnancy under the 1967 Abortion Act.

Information on deaths where one or more congenital anomalies were considered to have played a part in the death is available from death registrations. The Births and Deaths Registration Act of 1874 made it compulsory for death registration to be supported by a medical certificate specifying causes of death. Since 1949, greater detail has been required about these causes. Meanwhile, in 1926, registration of stillbirths was made compulsory, collecting similar information on the causes of stillbirth. The 1938 Population (Statistics) Act required important additional information to be provided to the registrar. This included details about the mother such as her age, and multiplicity, variables considered here.

NCAS began in 1964 after the thalidomide epidemic. The system was originally designed to detect external visible malformations in live and stillbirths, such as the severe limb reduction defects associated with thalidomide, since these were expected to be well notified. Internal malformations and chromosomal anomalies were often not identified within the notification period so were usually missed from the system. Health Authorities, usually using information collected at the statutory notification of births, carry out notification on a voluntary basis. More recently, in some areas, the local Congenital Anomaly Register (CAR) has taken over notification for their area. Malformations in fetuses aborted spontaneously early in pregnancy or therapeutic abortions under the 1967 Act are not included in the system.

Legal abortion was not introduced into England and Wales until April 1968 following the 1967 Abortion Act, so these were not considered for inclusion in the original NCAS. Nevertheless, ONS can identify those abortions that take place for congenital anomalies as we process abortion notifications on behalf of the Department of Health. These abortions for fetal anomaly take place under Grounds E of the Abortion Act 1967 (“there is a substantial risk that if the child were born it would suffer from such physical or mental abnormalities as to be seriously handicapped”) as amended by the Human Fertilisation and Embryology Act 1990.

## DATA QUALITY

There are two principal problems with the data reported to NCAS - under-notification and diagnostic misclassification. A recent review of NCAS<sup>3</sup> concluded that ‘ascertainment needs strengthening because the present voluntary system of notification by NHS Trusts is too haphazard. It is evident that there is a great need for medical input into the coding process. It is clear that medical guidance is required’.

Other matching exercises based on specific geographical areas or specific conditions have shown that notification to NCAS is incomplete, and the levels of under-notification vary for different conditions. Those conditions that are visible at birth are better notified than internal anomalies or chromosomal anomalies awaiting cytogenetic confirmation which are likely to be less well notified. Levels of notification also vary geographically. However, in those areas where the local Register has taken over notification, substantial improvements in ascertainment have been achieved since 1997.<sup>4</sup> Notification, however, is unlikely to be biased when considering the mother’s age, the child’s sex or whether the child was one of a multiple birth, variables considered in this article.

One such matching exercise was undertaken using notifications of NTDs, comparing those notified to NCAS with those notified to the West Midlands Congenital Anomaly Register (CAR).<sup>5</sup> This was based on registrable births in 1995 for West Midlands residents. The comparison found that NCAS had 21 cases of NTDs and the local register had 30 cases. The CAR matched 19 of the 21 cases from NCAS with its own. The two cases of NTDs identified by NCAS only were both recorded on the local register; however, neither was recorded as an NTD locally.

## PRENATAL DIAGNOSIS

A pregnancy may terminate in an abortion if prenatal diagnosis suggests that the fetus has an NTD. Originally, NTDs were detected prenatally by measuring levels of maternal AFP in blood, followed by an amniocentesis to estimate the level of AFP in the liquor. AFP makes up much of the fetal blood protein at 16 weeks and is raised in situations where the blood protein can leak out from the fetus into the liquor. This is usually prevented by fetal skin, so therefore any open defects (not covered with skin), as is the case for NTDs, may be identified in this way. Amniocentesis has now been superseded by ultrasound in making the diagnosis of an NTD since this removes the risk of miscarriage associated with amniocentesis.

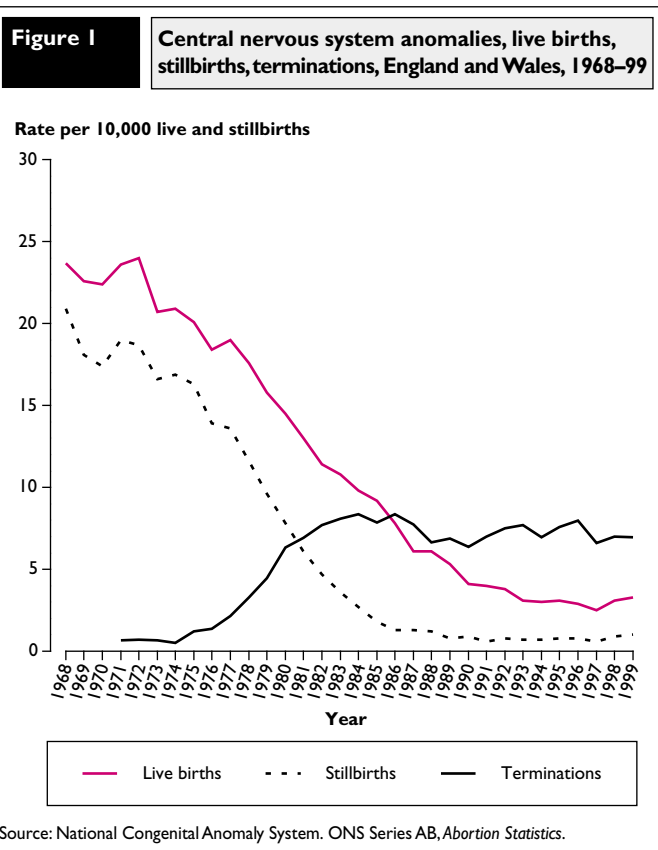
Ultrasound scanning is very effective as a screening tool. Anencephaly is possible to diagnose at 12 to 14 weeks by visualisation of the cranium. Spina bifida is often diagnosed using the cranial signs of an abnormal shape of the fetal skull (lemon shape) and flattening and loss of the median sulcus in the cerebellum. Hydrocephalus is often associated with spina bifida and the spine itself can be examined to demonstrate failure of closure of the vertebral arches, lack of skin cover and herniation.

**OVERALL TRENDS**

Table 1 shows the numbers and rates of live and stillbirths with central nervous system anomalies (CNS) notified to NCAS in England and Wales for the years 1968–99. The overall rates are shown in Figure 1. CNS is a larger group than NTDs since it includes other anomalies including hydrocephaly and microcephaly. These rates are shown here, however, to enable comparisons with abortion data - separate abortion data for NTDs are not available before 1995. Including these additional conditions inflates the total number by approximately 30 per cent.

There has been a constant decline in CNS rates in live births over the past three decades, in 1997 reaching levels one tenth of those in the mid-1960s. There was a slight increase in the rates in 1998 and 1999, largely due to the start of data exchange with regional registers who provide data that are more complete to NCAS. This shows that the decline in rates of NTDs predated public and professional knowledge about the benefits of folic acid supplementation.

Before the 1990s, there was a decline in the NTD rates and improved diet has been suggested as one possible explanation for this fall. Regional congenital anomaly registers have detected no decline in NTD pregnancies during the 1990s.<sup>6</sup> Figure 2 shows the data from this analysis, with NCAS data added for comparison. The reasons why NCAS showed a continued decline but the regional registers showed no such fall may be due to changes in ascertainment for either notifications to NCAS or of specified NTDs on abortion notification forms. Alternatively, it could reflect improving ascertainment in the regional registers concealing a true fall in prevalence. It might also be

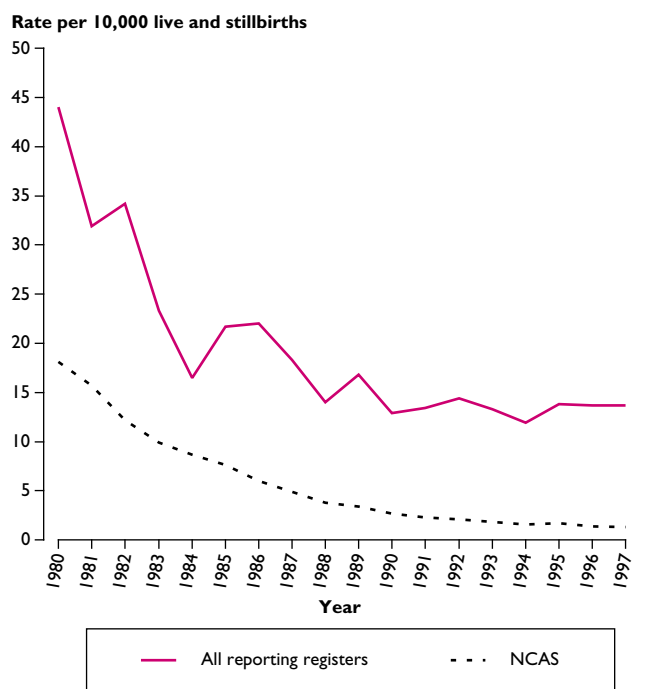


**Table 1** Central nervous system, live births, stillbirths, terminations; numbers and rates per 10,000 total births, England and Wales 1968–99

	Numbers				Rates		
	Live births	Stillbirths	Terminations	Terminations as a percentage of total	Live births	Stillbirths	Terminations
1968	1,966	1,736			23.7	20.9	
1969	1,830	1,462			22.6	18.1	
1970	1,783	1,385			22.4	17.4	
1971	1,869	1,509	53	1.5	23.6	19.0	0.7
1972	1,758	1,371	51	1.6	24.0	18.7	0.7
1973	1,416	1,137	45	1.7	20.7	16.6	0.7
1974	1,352	1,091	34	1.4	20.9	16.9	0.5
1975	1,222	990	73	3.2	20.1	16.3	1.2
1976	1,085	821	81	4.1	18.4	13.9	1.4
1977	1,088	782	124	6.2	19.0	13.6	2.2
1978	1,059	697	n/a	n/a	17.6	11.6	-
1979	1,013	619	285	14.9	15.8	9.6	4.4
1980	955	514	418	22.2	14.5	7.8	6.3
1981	829	388	441	26.6	13.0	6.1	6.9
1982	719	293	486	32.4	11.4	4.7	7.7
1983	684	227	511	35.9	10.8	3.6	8.1
1984	629	172	536	40.1	9.8	2.7	8.4
1985	605	121	517	41.6	9.2	1.8	7.8
1986	515	87	556	48.0	7.8	1.3	8.4
1987	418	86	529	51.2	6.1	1.3	7.7
1988	426	81	464	47.8	6.1	1.2	6.7
1989	364	58	475	53.0	5.3	0.8	6.9
1990	293	63	452	55.9	4.1	0.9	6.4
1991	278	45	492	60.4	4.0	0.6	7.0
1992	264	53	519	62.1	3.8	0.8	7.5
1993	210	44	521	67.2	3.1	0.7	7.7
1994	203	49	465	64.9	3.0	0.7	7.0
1995	203	49	494	66.2	3.1	0.8	7.6
1996	186	50	520	68.8	2.9	0.8	8.0
1997	163	41	426	67.6	2.5	0.6	6.6
1998	199	59	448	63.5	3.1	0.9	7.0
1999	204	61	434	62.1	3.3	1.0	6.9

Source: National Congenital Anomaly System. ONS Series AB, Abortion Statistics.

**Figure 2** Comparison of NTD rates for all reporting registers (combined) and NCAS, 1980-97

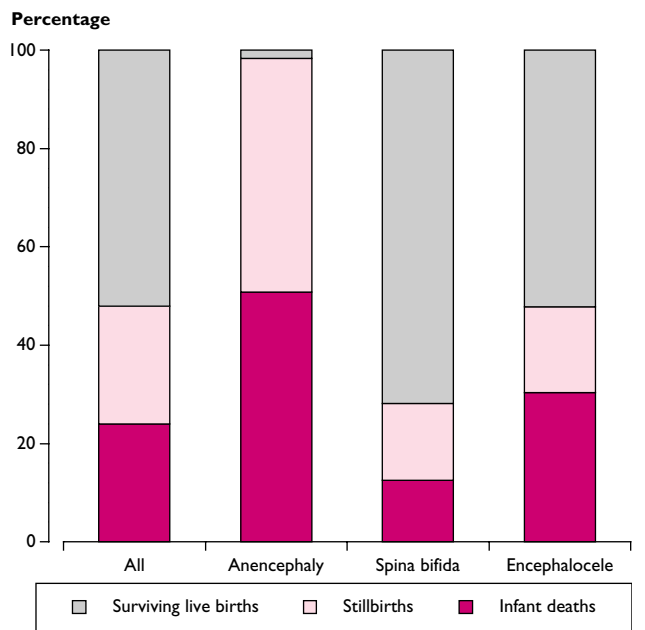


Source: National Congenital Anomaly System. L Abramsky, *Lancet* 354 (1999), 998-999.

a result of the local birth denominators improving in completeness over time.

To investigate the contribution of abortion to NTDs, Table 1 also shows the proportion of notified CNS cases which resulted in a legal termination of pregnancy. This proportion increased from 1.5 per cent in the 1970s, to 40 per cent in the mid-1980s and over 60 per cent from

**Figure 3** Survival of babies with NTDs, England and Wales 1997-99



Source: ONS unpublished data.

1991 onwards. Thus as prenatal techniques have become more sophisticated, a higher proportion of NTDs have been detected antenatally. This has led to an increase in the number of terminations for these conditions. Improved notification from regional registers in 1998 and 1999, with no commensurate changes in reporting of legal abortions is likely to account for the fall in the proportion of abortions in these years.

**TRENDS IN SPECIFIC CONDITIONS**

Table 2 shows the number and rate of notifications of selected NTDs; anencephaly, spina bifida and encephalocele. The overall sharp decline in total notification rates has been reflected in all the conditions selected, but the sharpest decline has been in anencephaly, which declined by 96 per cent over the period. Spina bifida declined by 94 per cent and encephalocele by 95 per cent. Some of this fall will have been a result of prenatal diagnosis and termination of the pregnancy.

**TRENDS BY OUTCOME**

Figure 3 shows notifications to NCAS in 1997-99 by their outcome. These data were made possible through linkage of NCAS with birth registration records.<sup>7</sup> Since birth records are also linked to death records, survival of children with anomalies can be measured. Overall, one half of NTD notifications resulted in a live birth surviving at the time of analysis, one quarter were live births which had resulted in death, and one quarter were stillbirths. However, this conceals differences between the different conditions. Unsurprisingly, half of anencephalic babies were stillborn and the remaining babies died in the first year (mostly within the first week of life). In comparison, 72 per cent of babies with spina bifida were still surviving at the time of analysis.

**TRENDS BY MOTHER'S AGE**

Table 3 shows that until 1994 notification rates of NTDs followed a U shaped curve with highest rates for women aged under 25 and over 40. Rates for all age groups have fallen, but particularly in the older ages. By 1995-99 the rates for women aged 40 and over were lowest of all. (Figure 4). This is likely to be a result of improved prenatal diagnosis, particularly for older women. Rates for women aged under 20 are consistently higher than those for older ages. By contrast, these are the women least likely to have prenatal diagnosis.

**TRENDS BY SEX**

Table 4 shows for registered stillbirths, girls have a rate of NTDs twice that of boys. Notifications from NCAS and registered neonatal deaths show a smaller differential, but rates are higher for girls.

**TRENDS BY MULTIPLICITY**

Rates of NTDs are higher for multiple births than for singletons. Whilst singleton rates for anencephaly are generally half those of spina bifida, Figure 5 shows that their rates for multiple births alone are very similar. This may reflect the fact that anencephalic babies are less likely to be terminated in a twin pregnancy so more likely to result in a stillbirth and hence be counted in these data.

The ratio between the NTD rate for singletons and that for multiple births has been increasing – from 0.8 in 1976 to 6.1 in 1998 (Figure 6). Results from a study of triplets and higher order births born in 1980 and 1982-85 were within this range, showing a rate of 4 per thousand for central nervous system anomalies in multiple births as reported by obstetricians.<sup>8</sup> This is lower than would be expected from the findings presented here, although a contributing factor may be that the earlier study had excluded multiple births where 3 or more children were not still alive at the time of contact.

**Table 2** Neural tube defects by live births, stillbirths, neonatal deaths and terminations, England and Wales 1975–99

		NCAS data			Registered stillbirths	Neonatal deaths	Terminations
		Total*	Live births	Stillbirths			
<b>Numbers</b>							
NTD	1975–79	8,106	4,829	3,249	3,943	2,388	751
	1980–84	4,141	2,937	1,176	1,329	1,149	1,902
	1985–89	1,734	1,471	244	349	616	2,090
	1990–94	722	598	116	192	285	1,935
	1995–99	477	340	122	232	151	1,624
Anencephaly	1975–79	2,967	412	2,546	3,159	381	477
	1980–84	963	222	737	913	214	1,827
	1985–89	219	84	134	186	104	1,931
	1990–94	120	57	62	105	86	1,263
	1995–99	139	66	68	129	90	807
Spina bifida	1975–79	4,549	3,545	988	690	1,805	331
	1980–84	2,733	2,235	476	363	805	619
	1985–89	1,126	1,013	97	137	270	733
	1990–94	433	376	51	62	90	776
	1995–99	307	250	55	84	48	676
Encephalocele	1975–79	654	537	114	86	192	6
	1980–84	318	260	57	49	118	67
	1985–89	161	137	23	30	91	140
	1990–94	86	75	10	24	30	151
	1995–99	40	30	9	23	22	138
<b>Rates</b>							
NTD	1975–79	26.9	16.0	10.8	13.1	7.9	2.5
	1980–84	12.9	9.2	3.7	4.2	3.6	5.9
	1985–89	5.1	4.3	0.7	1.0	1.8	6.2
	1990–94	2.1	1.7	0.3	0.6	0.8	5.6
	1995–99	1.5	1.1	0.4	0.7	0.5	5.1
Anencephaly	1975–79	9.8	1.4	8.4	10.5	1.3	1.6
	1980–84	3.0	0.7	2.3	2.9	0.7	5.7
	1985–89	0.6	0.2	0.4	0.5	0.3	5.7
	1990–94	0.3	0.2	0.2	0.3	0.2	3.7
	1995–99	0.4	0.2	0.2	0.4	0.3	2.5
Spina bifida	1975–79	15.1	11.8	3.3	2.3	6.0	1.1
	1980–84	8.5	7.0	1.5	1.1	2.5	1.9
	1985–89	3.3	3.0	0.3	0.4	0.8	2.2
	1990–94	1.3	1.1	0.1	0.2	0.3	2.3
	1995–99	1.0	0.8	0.2	0.3	0.1	2.1
Encephalocele	1975–79	2.2	1.8	0.4	0.3	0.6	0.0
	1980–84	1.0	0.8	0.2	0.2	0.4	0.2
	1985–89	0.5	0.4	0.1	0.1	0.3	0.4
	1990–94	0.2	0.2	0.0	0.1	0.1	0.4
	1995–99	0.1	0.1	0.0	0.1	0.1	0.4

\* Total includes unknown whether live or stillborn.

Source: National Congenital Anomaly System. ONS unpublished data.

The ratio of spina bifida cases in multiple births to singletons increased from 0.8 in 1976 to 4.0 in 1998. For anencephaly the increase is more striking – from 0.9 in 1976 to a maximum of 22.6 in 1994.

### TRENDS BY COUNTRY

Stillbirth rates where NTDs were mentioned on the medical certificate of stillbirth showed that rates were similar for England and for Wales. Notifications to NCAS, however, showed that until recently notification rates were higher in England than in Wales (Figures 7a–7b). This trend

**Table 3** Neural tube defects, rates, England and Wales, 1975–99

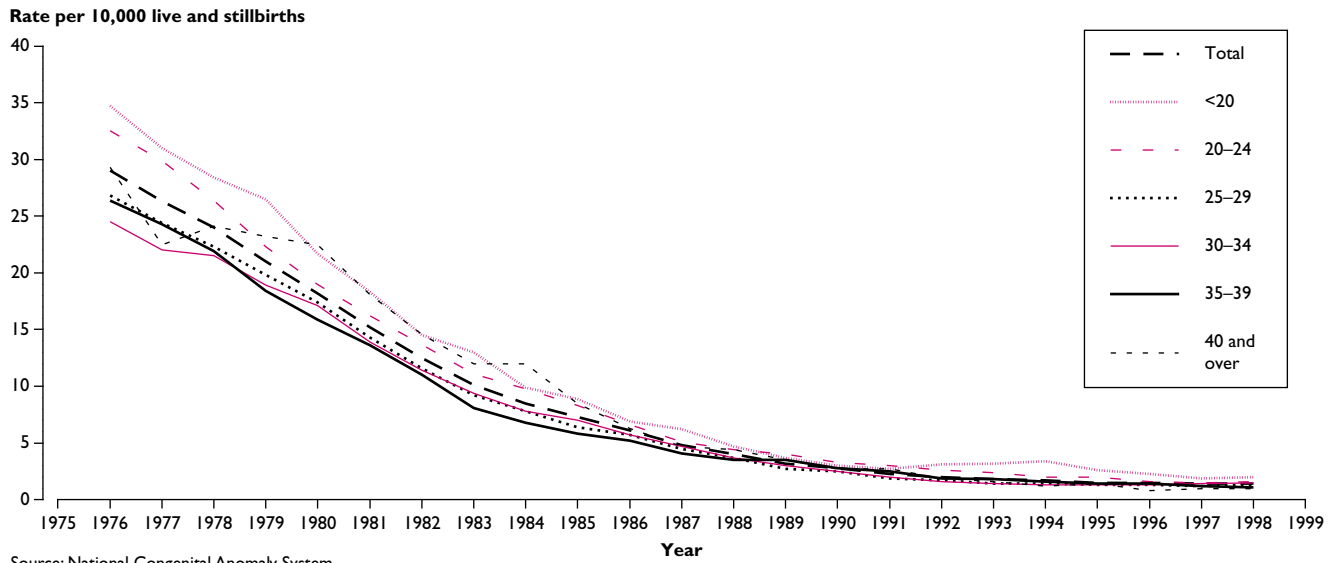
Rates per 10,000 live and stillbirths

	Total	<20	20–24	25–29	30–34	35–39	40 and over
1975–1979	26.9	32.3	29.2	24.4	22.6	23.8	26.8
1980–1984	12.9	15.6	13.8	12.0	11.8	10.5	15.9
1985–1989	5.1	5.8	5.7	4.6	4.7	4.5	5.2
1990–1994	2.1	3.1	2.7	1.7	1.7	2.1	2.1
1995–1999	1.5	2.2	1.7	1.3	1.4	1.2	1.1

Source: National Congenital Anomaly System.

**Figure 4**

**NTDs by mother's age (3 year moving average), England and Wales 1975-99**



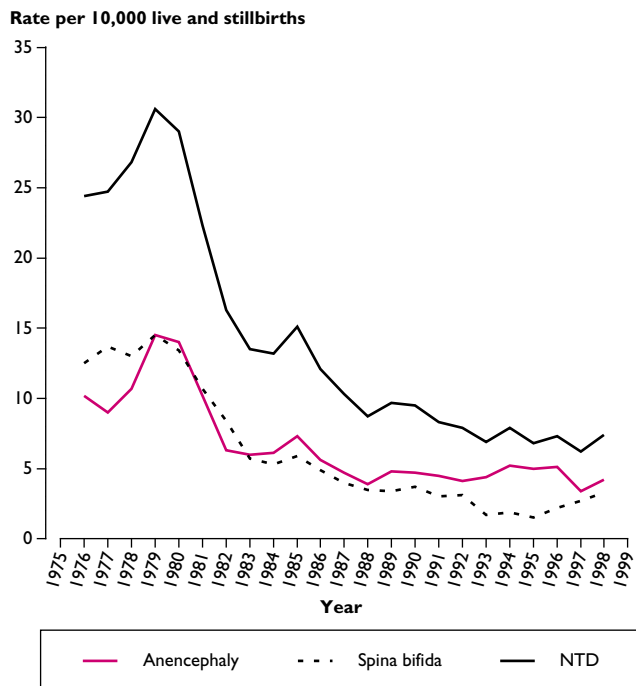
**Table 4**

**NTDs, NCAS, Registered stillbirths, and Registered neonatal deaths. Male, Female rates per 10,000 live and stillbirths, England and Wales 1975-99**

	<b>NTD</b>								
	NCAS			Stillbirths			Neonatal deaths		
	Male	Female	M/F ratio	Male	Female	M/F ratio	Male	Female	M/F ratio
1975-1979	20.8	32.6	0.6	8.0	18.5	0.4	6.5	9.6	0.7
1980-1984	10.2	15.5	0.7	2.5	5.9	0.4	2.9	4.3	0.7
1985-1989	4.6	5.6	0.8	0.8	1.3	0.6	1.5	2.2	0.7
1990-1994	1.8	2.3	0.8	0.4	0.7	0.6	0.7	0.9	0.8
1995-1999	1.2	1.7	0.7	0.5	0.9	0.6	0.4	0.5	0.8
	<b>Anencephaly</b>								
	NCAS			Stillbirths			Neonatal deaths		
	Male	Female	M/F ratio	Male	Female	M/F ratio	Male	Female	M/F ratio
1975-1979	6.1	13.5	0.5	6.1	15.1	0.4	1.1	1.4	0.8
1980-1984	1.9	4.2	0.4	1.6	4.1	0.4	0.6	0.8	0.7
1985-1989	0.5	0.8	0.6	0.4	0.7	0.6	0.3	0.4	0.8
1990-1994	0.3	0.4	0.6	0.2	0.4	0.5	0.2	0.3	0.6
1995-1999	0.3	0.5	0.6	0.3	0.5	0.5	0.2	0.4	0.6
	<b>Spina bifida</b>								
	NCAS			Stillbirths			Neonatal deaths		
	Male	Female	M/F ratio	Male	Female	M/F ratio	Male	Female	M/F ratio
1975-1979	12.7	18.2	0.7	1.6	3.0	0.5	5.0	7.2	0.7
1980-1984	8.4	11.5	0.7	0.7	1.5	0.5	2.1	3.0	0.7
1985-1989	3.4	4.7	0.7	0.3	0.5	0.6	0.6	1.1	0.5
1990-1994	1.3	1.6	0.8	0.1	0.2	0.6	0.2	0.3	0.8
1995-1999	0.8	1.0	0.8	0.2	0.3	0.8	0.2	0.1	1.6
	<b>Encephalocele</b>								
	NCAS			Stillbirths			Neonatal deaths		
	Male	Female	M/F ratio	Male	Female	M/F ratio	Male	Female	M/F ratio
1975-1979	1.7	2.6	0.7	0.2	0.4	0.5	0.4	0.9	0.4
1980-1984	0.7	1.2	0.6	0.1	0.2	0.6	0.3	0.5	0.5
1985-1989	0.4	0.6	0.6	0.1	0.1	0.7	0.2	0.3	0.6
1990-1994	0.2	0.3	0.6	0.1	0.1	0.8	0.1	0.1	1.1
1995-1999	0.1	0.2	0.6	0.0	0.1	0.3	0.1	0.1	1.1

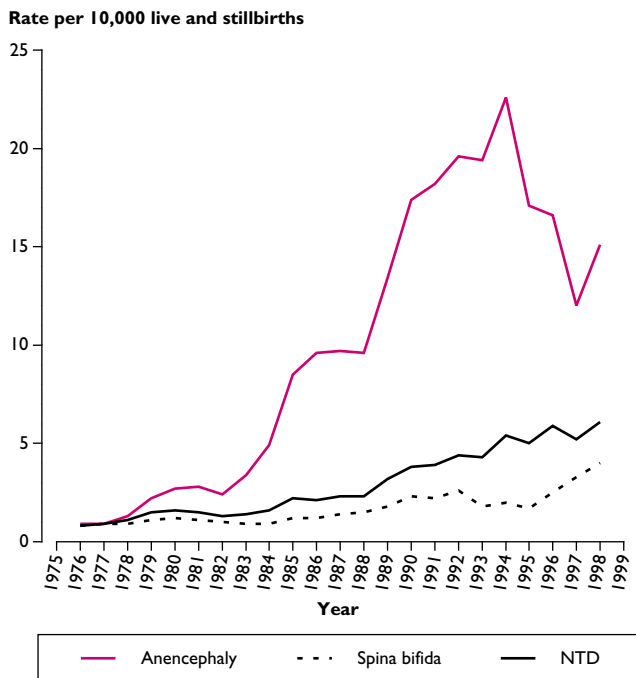
Source: National Congenital Anomaly System. ONS unpublished data.

**Figure 5** NTD multiple births (3 year moving average), England and Wales 1975-99



Source: National Congenital Anomaly System.

**Figure 6** Multiple/singleton ratio (3 year moving average), 1975-99



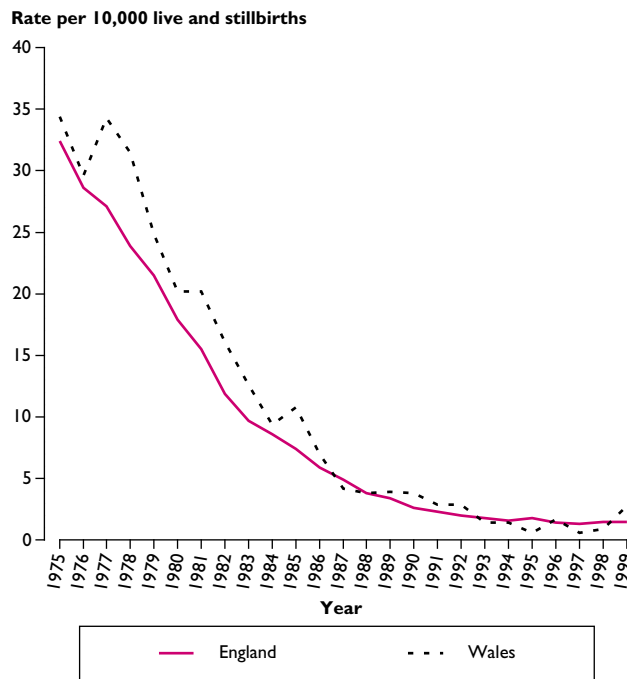
Source: National Congenital Anomaly System.

has recently been reversed. Since stillbirth and neonatal death rates are so similar, it is unlikely that the underlying birth prevalence rates differ between the two countries. It is therefore probable that the recent reversal in trend is a direct result of better ascertainment as the local CARIS register in Wales has taken over notification to NCAS.

**EXTERNAL INFLUENCES**

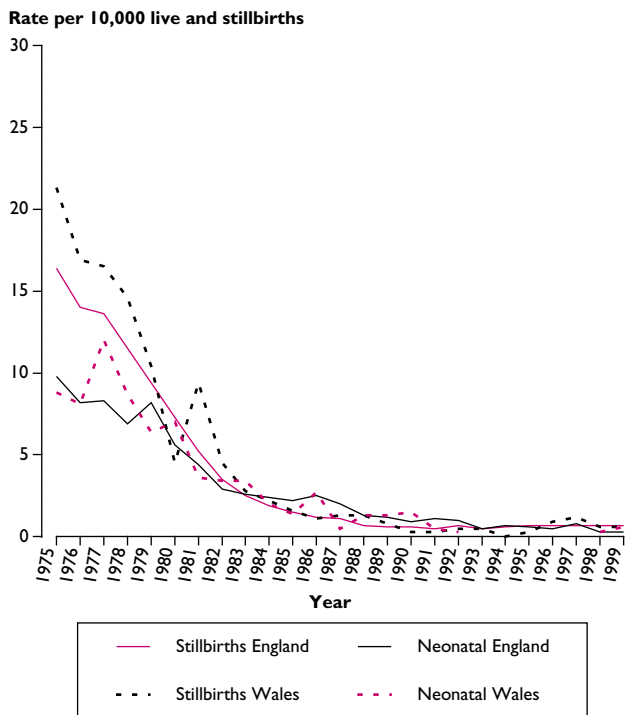
The etiology of NTDs has been explored for several decades. Much of the work has centred on the impact of diet, and more recently, folic acid on the risk of NTDs, plus the possible association of drugs and assisted conception techniques used in the management of infertility.

**Figure 7a** NTDs by country of birth, England and Wales, 1975-99



Source: National Congenital Anomaly System.

**Figure 7b** NTDs (stillbirths, neonatal deaths) by country of birth, England and Wales, 1975-99



Source: ONS unpublished data.

## Ovulation induction drugs

In recent years the number of multiple births has been increasing. Part of the increase has been due to increasing use of infertility drugs to induce ovulation, and infertility procedures such as in vitro fertilisation (IVF). In the 1970s, several cases of NTDs were reported in children whose mothers had received the drug clomiphene to induce ovulation.<sup>9</sup> Subsequently in Australia an increased number of NTDs were found amongst children conceived as a result of IVF.<sup>10</sup> Data in the late 1980s from two congenital anomaly registers and from two obstetric clinics also showed an association between the use of drugs to induce ovulation and NTDs. The relative risk of NTD following ovulation induction for these different studies ranged from 1.6 to 5.75, but because of the small numbers, the differences between these studies are not statistically significant.<sup>9</sup> In contrast, the study of triplets and higher order births, found that very few of the women who had babies with anomalies had undergone any form of infertility treatment,<sup>8</sup> although again this study had excluded those pregnancies where the mother had lost one or more children from the multiple birth. As shown earlier, babies with NTDs, especially anencephaly, were likely to have died by the time of this analysis.

## Folic acid supplementation

Trials published in 1991 showed that folic acid had a preventative effect on recurrence and first occurrence of NTDs.<sup>1</sup> It is possible to buy vitamin supplements with the recommended daily dosage. The critical period for adequate intake of folic acid, however, is in the immediate preconception period and the first weeks of pregnancy. Therefore, in order to achieve the maximum benefit from the supplementation it is essential that the woman is aware of the need to enhance her intake of folic acid before she becomes pregnant. It will be too late once they confirm that they are pregnant.

There have been a number of surveys during the 1990s to measure folic acid awareness among women of childbearing age.<sup>11–13</sup> These surveys showed that the proportion of women taking supplements before conception rose from 1.8 in 1993 to 18.2 in 1994 and to 30.6 in 1996. Those taking supplements after conception rose from 5.7 in 1993 to 20.7 in 1994 and 38.8 in 1996.

A survey of 1,357 women in a West London antenatal clinic from January to May 1998, found that 28 per cent had not taken folic acid before attendance at the clinic.<sup>14</sup> Attendance, however, was not necessarily before 12 weeks into their pregnancy and none of these women were aware of the benefits of the vitamin supplement. In that study, there were no live deliveries of NTDs since they were all diagnosed during a pre-natal ultrasound. There were, however, six terminations for NTDs.

A more recent survey interviewed 226 women making a clinic visit to Leeds General Infirmary between August and November 1998.<sup>15</sup> The sample size was approximately a third of the earlier studies in Leeds but, despite this small sample size, general trends could be identified.

Awareness amongst women aged under 20 was 50 per cent, but this proportion rose to over 80 per cent for older women. Knowledge of folic acid and its importance in relation to pregnancy increased with age. Sixty five per cent of the women aged 25 and over were aware that folic acid prevented spina bifida in comparison to 13 per cent of women aged under 25.

The respondents were analysed by whether their pregnancy was planned. Overall, 54 per cent of those surveyed had unplanned pregnancies. However, this proportion varied by age. Eighty three per cent of the women aged under 20 and 80 per cent of those aged 40–44

had unplanned pregnancies. In comparison, 43 per cent of the pregnancies to those aged 25–29 were unplanned.

These survey results agree with other studies in Britain that 50 per cent of all pregnancies are unplanned. Since the neural tube closure occurs so early in pregnancy this may be before the woman even knows that she is pregnant. If the pregnancy was unplanned, it is unlikely that the woman would have been taking a folic acid supplement. Therefore, food fortification has been suggested as the best strategy for increasing blood folate levels.<sup>16</sup> In 1996, the US Food and Drug Administration ordered, that to prevent neural tube defects, all enriched cereal grain products should be fortified with folic acid by January 1998.<sup>17</sup> A survey in 1999 found that the average level of folic acid in the blood of US women had almost tripled in five years.<sup>18</sup> The average red blood cell folate concentration, a better measure of long term folate status, in women of childbearing age was double that found in women in a similar study conducted from 1988 to 1994. A consultation document, which focuses on a reduction in heart disease through folic acid, suggests similar fortification in England.<sup>19</sup>

## CONCLUSIONS

The data presented here show that the decline in rates of NTDs predated public and professional knowledge about the benefits of folic acid supplementation.

NTD rates for women aged under 20 are consistently higher than those for other ages, and the survey findings showed that this is the age group with lowest awareness of the benefit of folic acid supplementation. As prenatal techniques have become more sophisticated, a higher proportion of NTDs are detected antenatally. This has led to an increase in the number of terminations for these conditions.

## REFERENCES

1. MRC Vitamin Study Research Group. Prevention of neural tube defects: results of the Medical Research Council Vitamin Study. *Lancet* 338 (1991), 131–37.
2. *Congenital malformations worldwide: A report from the International Clearinghouse for Birth Defects Monitoring Systems*. Elsevier 1991.
3. Lowry B. *Review of the National Congenital Anomaly System*. December 2000.
4. Botting B. The impact of more complete data from Wales on the National Congenital Anomaly System. *Health Statistics Quarterly* 05 (2000), 7–9.
5. West Midlands Perinatal Audit. *Neural Tube defects 1995, Report of Incidence, Detection and Outcome*.
6. Abramsky L, Botting B, Chapple J and Stone D. Has advice on periconceptional folate supplementation reduced neural-tube defects? *Lancet* 354 (1999), 998–999.
7. Botting B and Abrahams C. Linking congenital anomaly and birth records. *Health Statistics Quarterly* 08 (2000), 36–40.
8. Botting BJ, Macfarlane AJ and Price FV. *Three, Four and More; A study of triplets and higher order births*. HMSO 1990.
9. Cornel MC, Ten Kate LP and Te Meerman GJ. Association between Ovulation Stimulation, In Vitro Fertilisation, and Neural Tube defects? *Teratology* 42 (1990), 201–203.
10. Lancaster PAL. Congenital malformations after in-vitro fertilisation. *Lancet* 2 (1987), 1392–3.
11. Sutcliffe M, Christopher J Schorah, Perry A and Wild J. Prevention of neural tube defects. *Lancet* 342 (1993), 1174.
12. Sutcliffe M, Christopher J Schorah, Perry A and Wild J. Prevention of neural tube defects. *Lancet* 344 (1994), 1578.

13. Sutcliffe M, Christopher J Schorah, Perry A and Wild J. Prevention of neural tube defects. *Lancet* 350 (1997), 30–31.
14. Michie C, Narang I and Rogers J. Folate supplementation and neural tube defects. *Lancet* 355 (2000), 147.
15. Dighton C. Personal communication.
16. Kadir RA, Babin C, Whitlow B *et al.* Neural tube defects and periconceptional folic acid in England and Wales: retrospective study. Commentary: Food should be fortified with folic acid. *BMJ* 319 (1999), 92–93.
17. In brief. *BMJ* 318 (1999), 1506.
18. News. Fortification of flour likely to halve neural tube defects, says CDC. *BMJ* 321 (2000), 1176.
19. Department of Health. Report on Health and Social Subjects No.50. *Folic Acid and the Prevention of Disease*. TSO (2000).

# Time trends in GP outpatient referrals

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**This article uses the General Practice Research Database to examine time trends in GP outpatient referral data for the period 1994–98 in England and Wales. There was a steady increase in rates of GP referrals over the 5-year period. The NHS plan states “assuming GP referrals remain broadly in line with the current trend in the growth of referrals, then the maximum waiting time for a routine outpatient appointment will be halved...”. Future referral numbers need to be assessed accurately because they have a direct impact on waiting times. This article examines the growth in recent years and projects future numbers of referrals assuming alternative referral growth patterns.**

## INTRODUCTION

Within the NHS the GP performs a gatekeeper role. Patients’ main access to hospital services is via GP outpatient referrals. Waiting times for NHS services are generally calculated as the time between the hospital receiving the GP referral letter and the patient visiting the hospital consultant clinic for the first time.<sup>1</sup> The NHS Plan<sup>2</sup> sets a target for reducing maximum waiting times for a routine outpatient appointment from over 6 months to 3 months by 2005 based on the assumption that GP referrals remain broadly in line with the current trend. Looking at the changes in GP referrals and predicting future trends is an important method of assessing demand for hospital services.

The NHS plan<sup>2</sup> also says that “By April 2001 every GP practice and primary care group/trust must have in place systems to monitor referrals rates from every GP practice, ...”. The General Practice Research Database (GPRD) is a useful tool for examining GP referral rates because it contains information by age and sex and specialty which is not currently available from other national sources. Individual practices and primary care groups/trusts can use GPRD data for comparison with locally produced referral rates.

The objective of our analysis was to examine time trends in GP outpatient referral rates for the 5-year period 1994–98. We also estimated national referral figures for 1994–98 using referral rates from the GPRD and compared these to national data from the Department of Health. Finally, we projected referral numbers for the years 1999–2002 to assess the likely future demand for hospital services.

## METHODS

### GPRD referral data

The referral data used in this analysis were published in *Key Health Statistics from General Practice 1998*<sup>3</sup> (KHS98) in October 2000. This publication is the third in a series of reports produced using data from the General Practice Research Database (GPRD), a database of anonymised medical records (see Box 1). The analysis used data from 211 practices. Practices were included if they submitted data to the GPRD throughout the five-year period 1994–98 and the data passed quality checks. The practices had a total population of 1.4 million patients in 1998, representing 2.6 per cent of the population of England and Wales. There is some variation in coverage between regions, from 1.4 per cent in North Thames to 3.6 per cent in West Midlands. A comparison of the 1998 population (of the 211 practices) by age and sex with the mid-1998 population of England and Wales shows that the age distributions were very similar.<sup>3</sup>

## Box one

### GENERAL PRACTICE RESEARCH DATABASE (GPRD)

The General Practice Research Database (GPRD) was originally set up in 1987 by the VAMP software company and was subsequently acquired by Reuters Health Information Ltd. who donated it to the Department of Health in 1994. In July 2000 there were 371 practices across the UK submitting data to the GPRD. Initially all practices contributing to GPRD used VAMP Medical practice software. However, a proportion of the 371 practices now submitting data to GPRD have moved to Vision practice software and their data were not included in the production of *Key Health Statistics from General Practice 1998* (KHS98).<sup>3</sup> All 211 practices included in KHS98 were using VAMP Medical practice software during the period 1994 to 1998.

Participating practices follow agreed guidelines for the recording of clinical data. These guidelines include entering all events resulting in a hospitalisation or referral to any specialist. Collected data are regularly assessed to ensure that practices are recording to the necessary levels. The accuracy and comprehensiveness of the data recorded in the GPRD has been documented previously.<sup>4,5,6</sup>

With information on several million patients and up to 12 years of longitudinal data the GPRD is a unique data source for research into many aspects of morbidity, disease management and treatment. Many studies have used data from this database; these include analyses of disease epidemiology, time trends, regional and seasonal variations, prescribing patterns, pharmaco-epidemiology, drug safety studies, and other public health research. A bibliography is available on request from the General Practice Research Database, Medicines Control Agency, Floor 15, Market Towers, 1 Nine Elms Lane, SW8 5NQ or email [gprd@mca.gov.uk](mailto:gprd@mca.gov.uk)

A GP outpatient referral is defined as a request by the GP that a patient is seen in a specialist clinic. The referrals counted here were all to consultant outpatient clinics. Emergency admissions and attendance at A&E were not included. In general GPs only record the first referral of a patient to a clinic for an episode of care and not follow-up appointments arranged by the clinic or further appointments initialised by the GP within the same episode of care. Only referrals made while patients were registered and therefore ‘at risk’ were included.

Referral rates were calculated as the number of referrals per 1,000 patient years at risk. Patient years at risk were calculated for each year as the number of days that patients were registered during the year, divided by the number of days in the year.

To account for differing population age structures between the sexes and over time we calculated age-standardised rates for each sex by applying the age specific referral rates to the European standard population. We applied the age specific rates by 5-year age groups (except 10–15 and 16–19) from age 0 to 85 and over.

Referrals were classified by their clinical specialty as recorded by the GP when making the referral. Practices included in the analysis were all using VAMP Medical software (see Box 1). Box 2 shows the list of medical specialties presented to GPs by the VAMP Medical software. GPs can only select a specialty on the list and are not able to add their own.

Referrals to some specialties were excluded from this analysis; these are Obstetrics, Genito-urinary, X-ray, Pathology and Others. They were excluded because of variations in the way that different GPs can record referrals to these specialties within the VAMP Medical software. For example, there are a number of ways to record X-rays and Pathology using the VAMP Medical software most of which would be missed by an extract of referrals. Obstetric care is often managed jointly with local midwives so the referral procedure, and associated records, will vary from area to area.

## Box two

### GPRD VAMP MEDICAL SPECIALTIES

General Surgical  
 General Medical  
 Orthopaedic  
 Rheumatology  
 Ear, Nose and Throat  
 Gynaecology  
 Obstetrics  
 Paediatric  
 Ophthalmology  
 Psychiatry  
 Geriatrics  
 Dermatology  
 Neurology  
 Genito-urinary  
 X-ray  
 Pathology  
 Others

### Comparison with national data

For each calendar year we applied GPRD age-sex specific referral rates to the relevant England mid-year population estimates thus obtaining a GPRD-based estimate of the total number of referrals that took place in each year in England over the period 1994–98. In doing this, GPRD rates for England and Wales were used because rates for individual calendar years were not readily available for England only. However, referral rates published for the combined 5-year period 1994–98 show the rates for England to be very similar and in most cases identical to the England and Wales rates.

We compared the estimated GPRD-based national referrals with Department of Health data on GP written referral requests in England<sup>7</sup> (KH09 returns). This enabled us to assess whether changes over time in GPRD data could be explained by changing recording habits and whether GPRD data were consistent with national data. The KH09 national data are classified into 66 specialties, considerably more than those available to GPRD practices (see Box 2). We matched up the specialty groups in the two lists. For example, Gastroenterology and Medical Oncology (in the KH09 list) would be recorded under General Medicine (in the GPRD list). Using the selected subset of KH09 specialties that corresponded with those included in the GPRD analysis (that is excluding Obstetrics, Genito-urinary, X-ray, Pathology and Others), figures for national GP written referrals were estimated. The national KH09 figures are produced by financial year so an estimate for each calendar year was calculated by weighting the figures for the two relevant financial years; e.g. 1998 was calculated by using a quarter of the 1997/98 figure and three quarters of the 1998/99 figure.

### Projected referral numbers 1999–2002

To give an indication of the pressure that the number of referrals may put on the health services in the imminent future we used current trends in the GPRD referral rates to project the number of referrals that would occur in each of the years 1999–2002.

We produced three alternative projections based on different assumptions as to how referral rates will behave in forthcoming years. These variant projections were calculated by applying the age-sex

specific rates to the projected population in each of the years 1999–2002. For a base projection we applied the age-sex specific 1998 GPRD referral rates to each subsequent year. The level one projection was calculated by applying the average change over 1994–98 in each age-sex group. This was calculated as the arithmetic mean of the change over each of the previous four years. The level two projection (the highest projection) was calculated by applying the 1997–98 change in each age-sex group.

## RESULTS

### Analysis of GPRD referral rates

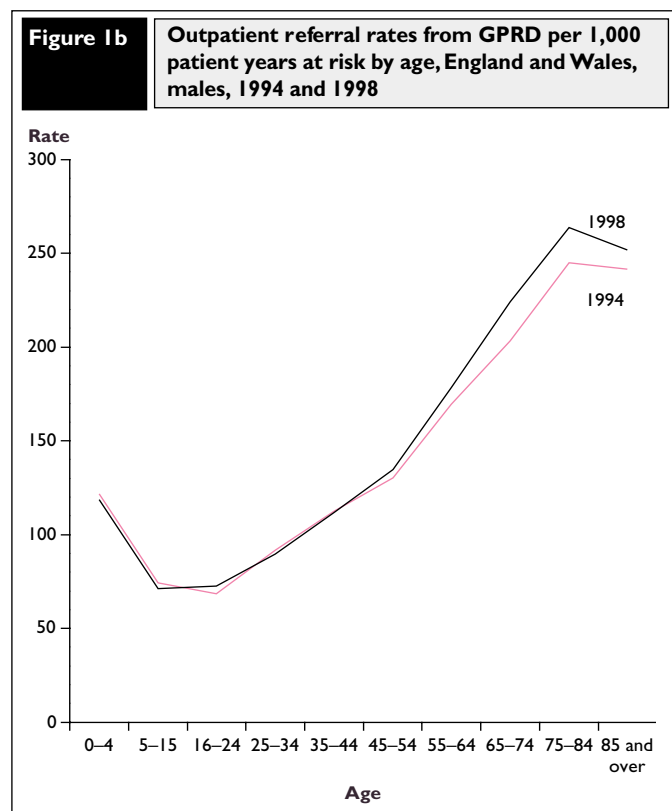
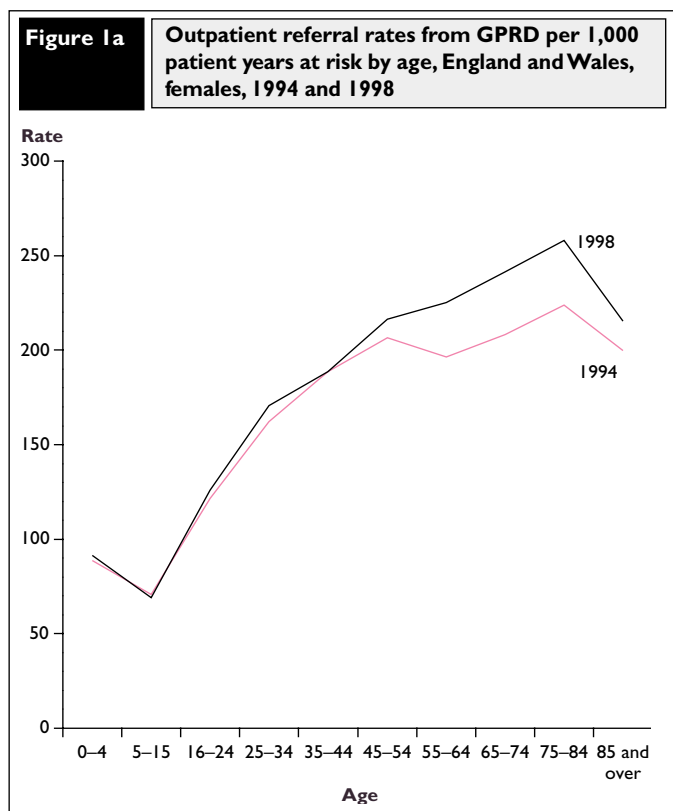
Table 1 shows GPRD outpatient referral rates for all specialties included in the analysis for the calendar years 1994–98. The age-standardised referral rate for females rose by 6.5 per cent between 1994 and 1998, to 166.0 per 1000 patient years at risk, while that for males also increased but by a lesser extent (2.6 per cent). Figure 1 shows that increases did not occur in all age groups. For females (Figure 1a), there was a slight decrease for 5- to 15- year-olds between 1994 and 1998. For females in other age groups below age 55 there were small increases, except for 35- to 44- year-olds which showed no change. Between ages 55 and 84 the increases in referral rates were much larger, in the region of 15 per cent. For males (Figure 1b) there were slight decreases in referral rates between 1994 and 1998 for all age groups under 45, except for 16- to 24- year-olds. Rates for those aged 45 and over increased, with the largest increases occurring at ages 65–74 (10 per cent) and 75–84 (8 per cent).

Table 2 shows the percentage change in referral rates by specialty between 1994 and 1998, for females and males respectively. This table also includes GPRD numbers of referrals in 1998 and the percentage distribution for the 211 practices and selected specialties included in this analysis. During the period 1994 to 1998, 40 per cent of referrals for men and over 50 per cent of referrals for women were to General Medicine, General Surgery or Orthopaedic. Therefore, despite decreases in some specialties, the increases in others (particularly in General Medicine - 10.2 per cent for men and 17.6 per cent for women) resulted in an overall rise in referral rates.

**Table 1** Outpatient referral rates from GPRD per 1,000 patient years at risk by age, sex and calendar year, England and Wales, 1994–98

	0–4	5–15	16–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and over	Crude rate	Age-standardised rate
<b>Males</b>												
1994	121.6	74.3	68.6	91.6	112.5	130.2	169.6	203.3	244.9	241.5	121.0	119.1
1995	115.6	74.0	70.1	93.8	110.1	129.9	171.3	216.5	249.3	241.2	122.4	120.0
1996	114.8	74.7	70.8	90.9	111.7	132.1	174.5	217.0	257.1	229.5	123.5	120.7
1997	118.8	71.0	71.0	89.6	108.9	129.5	173.3	218.2	258.5	239.2	122.6	119.6
1998	118.6	71.2	72.6	89.7	111.7	134.6	178.2	224.1	263.7	251.8	125.6	122.2
<b>% change 1994–98</b>	<b>-2.5</b>	<b>-4.2</b>	<b>5.8</b>	<b>-2.1</b>	<b>-0.7</b>	<b>3.4</b>	<b>5.1</b>	<b>10.2</b>	<b>7.7</b>	<b>4.3</b>	<b>3.8</b>	<b>2.6</b>
<b>Females</b>												
1994	88.9	70.7	121.5	162.3	188.6	206.6	196.3	208.2	223.7	199.8	162.5	155.9
1995	89.5	70.9	124.8	167.4	192.0	211.7	207.6	218.4	234.8	207.7	168.1	160.8
1996	90.0	69.3	123.5	170.9	187.7	210.6	208.1	224.9	246.6	213.2	169.5	161.1
1997	90.6	69.5	124.7	167.5	187.5	207.2	214.2	234.3	248.7	215.4	170.5	161.9
1998	91.3	69.0	126.0	170.7	188.7	216.3	225.3	241.4	258.2	215.4	175.0	166.0
<b>% change 1994–98</b>	<b>2.7</b>	<b>-2.4</b>	<b>3.7</b>	<b>5.2</b>	<b>0.1</b>	<b>4.7</b>	<b>14.8</b>	<b>15.9</b>	<b>15.4</b>	<b>7.8</b>	<b>7.7</b>	<b>6.5</b>

Source: Key Health Statistics from General Practice 1998.



**Table 2** 1994-98 percentage changes in GPRD referral rates, by sex and specialty, England and Wales

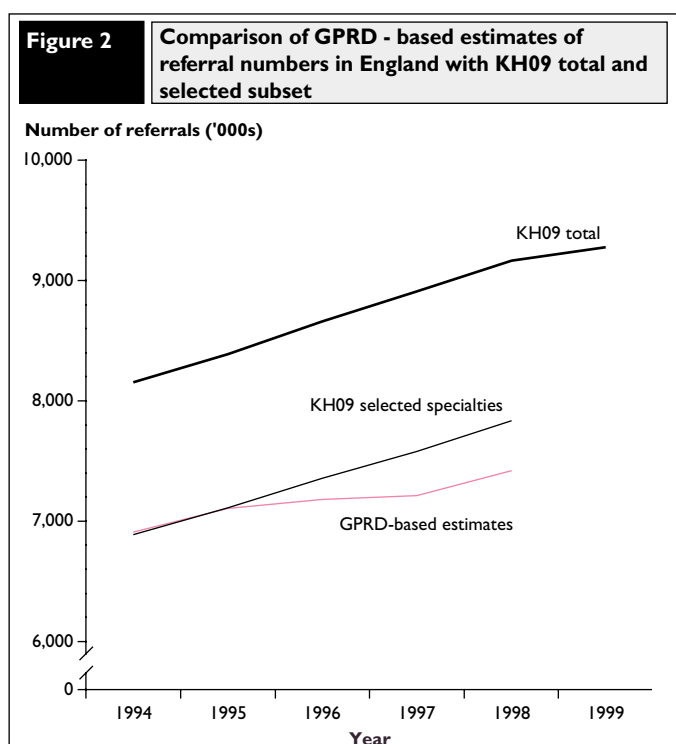
	Age-standardised rate (all ages)			Number of referrals	
	1994	1998	% change	1998	%
<b>Females</b>					
General medicine	17.0	20.0	17.6	13,840	12.5
General surgery	28.0	30.4	8.6	20,366	18.4
Orthopaedic	17.9	19.1	6.7	12,714	11.5
Rheumatology	4.7	4.9	4.3	3,252	2.9
Neurology	3.5	4.0	14.3	2,556	2.3
Gynaecology	30.8	30.5	-1.0	19,388	17.5
Ophthalmology	11.5	12.5	8.7	9,787	8.8
Geriatric	1.5	1.2	-20.0	1,430	1.3
Paediatric	5.6	6.5	16.1	3,138	2.8
Ear, nose and throat	15.5	15.3	-1.3	10,106	9.1
Psychiatry	6.9	7.7	11.6	5,183	4.7
Dermatology	13.0	13.9	6.9	9,206	8.3
<b>Total included specialties</b>	<b>155.9</b>	<b>166.0</b>	<b>6.5</b>	<b>110,966</b>	<b>100.0</b>
<b>Males</b>					
General medicine	16.7	18.4	10.2	12,112	15.6
General surgery	28.1	27.6	-1.8	17,870	23.0
Orthopaedic	18.5	19.1	3.2	12,140	15.6
Rheumatology	2.7	2.6	-3.7	1,665	2.1
Neurology	2.9	3.1	6.9	1,985	2.6
Gynaecology	0.1	0.1	0.0	49	0.1
Ophthalmology	10.3	10.7	3.9	7,047	9.1
Geriatric	1.3	0.9	-30.8	708	0.9
Paediatric	6.2	7.2	16.1	3,582	4.6
Ear, nose and throat	16.2	15.3	-5.6	9,574	12.3
Psychiatry	5.8	6.9	19.0	4,326	5.6
Dermatology	10.3	10.5	1.9	6,691	8.6
<b>Total included specialties</b>	<b>119.1</b>	<b>122.2</b>	<b>2.6</b>	<b>77,749</b>	<b>100.0</b>

Changes in referral rates varied considerably across specialties. Specifically, for both men and women, there were large increases to paediatric and psychiatry, as well as general medicine, and smaller increases to ophthalmology, dermatology, neurology and orthopaedic. While there was a large fall in referral rates to geriatric medicine this specialty only accounted for 1 per cent of total referrals.

### Comparison of GPRD estimates with routine national data

Estimating national referral figures using the GPRD rates gives the estimated national number of GP outpatient referrals in 1994 as 6,909,000. Compared with this, the number of GP written referral requests in 1994 (for the subset of specialties included in the GPRD analysis) from the routine national KH09 data was 6,887,000.

Figure 2 illustrates for England both the GPRD-based estimate, the routine national KH09 figure and the KH09 subset of GPRD matched



specialties, for each year in the period 1994–98. The total national numbers are included to show that the KH09 subset increases are consistent with overall increases. The GPRD-based estimates follow the same upward trend as the national data but with some variation.

The 1999 national KH09 figure for all specialties has been included in Figure 2. This shows a slowing down of the upward trend present between 1994 and 1998. The change between 1998–99, an increase of 1.3 per cent, is less than the rise in 1997–98 (2.9 per cent).

### Projected referral numbers

Table 3 contains projected referral numbers for 1999–2002 for England and also the differences between these and the 1998 GPRD-based estimates. The first section shows the base projections for the number of referrals that will occur in each year up to 2002 if the 1998 GPRD referral rates are prevailing to that date. Even with the rate remaining constant the number of referrals will rise steadily with an expected extra 165 thousand referrals in 2002, compared with 1998 (2.2 per cent increase).

The second section of the table shows the level one projections. If the average trend in each age group from 1994–98 continued in each year 1999–2002 this would result in a projected extra 594 thousand referrals in 2002, 8 per cent more than in 1998.

The final section of the table shows the level two projections. If the increase between 1997 and 1998 is applied in subsequent years, the number of projected referrals in 2002 is 937 thousand (12.6 per cent) higher than the number in 1998.

### DISCUSSION

Our analysis shows that age-standardised referral rates increased over the 5-year period 1994–98 by 2.6 per cent for males and 6.5 per cent for females. The largest increases were amongst the middle aged and the elderly, while there has been a small decrease in most age specific rates for children.

This overall increase in referral rates may be due to a combination of factors. One important factor is a rise in disease prevalence. KHS98<sup>3</sup> shows increases in the prevalence of several major diseases over the period 1994–98 such as diabetes, treated coronary heart disease and treated hypertension. For example, the age-standardised prevalence rate

**Table 3** Projected referral numbers, England, 1999–2002

Alternative Projections	Assumption		1998	1999	2000	2001	2002
Base	Rates remain constant at 1998 level	Referral numbers	7,422,017	7,465,309	7,507,462	7,546,086	7,587,236
		Increase on previous year		43,292	42,153	38,624	41,150
		Increase on 1998		43,292	85,445	124,069	165,219
		% increase on 1998		0.6	1.2	1.7	2.2
Level 1	Rates increase in line with (1994–98) average	Referral numbers	7,422,017	7,565,775	7,712,105	7,859,258	8,016,191
		Increase on previous year		143,758	146,330	147,153	156,933
		Increase on 1998		143,758	290,088	437,241	594,174
		% increase on 1998		1.9	3.9	5.9	8.0
Level 2	Rates increase in line with 1997–98 changes	Referral numbers	7,422,017	7,643,897	7,873,603	8,109,512	8,359,343
		Increase on previous year		221,880	229,705	235,910	249,830
		Increase on 1998		221,880	451,586	687,495	937,326
		% increase on 1998		3.0	6.1	9.3	12.6

for insulin treated diabetes increased from 4.1 to 5.1 per 1,000 patients for females (24 per cent) and from 4.6 to 5.7 per 1000 patients for males (24 per cent). This rise in the prevalence of diabetes is likely to have a significant influence on the number of referrals to secondary care. Many newly diagnosed patients will be referred to hospital for specialist services, included here under General Medicine and Ophthalmology, for assessment, since diabetes is a risk factor in heart disease, stroke, visual problems and kidney disease.

There may be other factors contributing to the overall increase in referral rates. For example, greater demand from patients for a hospital referral, a wider range of services being offered by hospitals or new treatments being available. However, there is currently little quantitative information in the literature which allows us to assess the effects of these factors on the numbers of referrals.

A shift in hospital organisation over the period 1994–98 may have contributed to the considerable variation in referral rate changes across specialties. The precise clinical boundaries between specialties can vary with local circumstances depending on the organisation of the NHS Trust within a particular area and are liable to change over time. The rise in referrals to the general medicine specialty may be partly linked to the fact that older patients are now less likely to be treated on geriatric wards for common conditions such as heart disease. This is supported by our analysis that shows a fall in referral rates to geriatric medicine.

Comparison of GPRD-based estimates of referral numbers with national KH09 data shows that GPRD data are consistent with national sources. While there is some variation between the KH09 subset of specialties and GPRD data this may be due to problems in matching GPRD specialty headings to KH09 specialties. Although the maximum discrepancy between national KH09 and GPRD estimates was 5 per cent in 1998, between 1997 and 1998 increases in referral numbers occurred at the same rate in both datasets.

A strength of our study is that GPRD provides information on the age-sex distribution of referral rates which is not available from other national sources. The GPRD sample is also well matched to the age-sex distribution of England and Wales. GPRD data, at least for some practices, includes private referrals which would not be in GP written request data (from KH09). It is not possible to distinguish private from NHS referrals within the GPRD, but the comparison shows GPRD data at or below KH09 levels, so private referral contribution to the GPRD total is small. Also, the GPRD is under-represented in inner city and deprived areas<sup>3</sup> which may not have the same pattern of referrals as other areas.

Applying referral rates for 1998 to the 2002 projected population for England, we estimate a 2.2 per cent increase in the number of referrals over the period. This increase in numbers of referrals despite static rates is found because of projected increases in the number of elderly people in the population and the high proportion of referrals in this age group. If referral rates continue increasing and rise above the 1998 level, specifically if the 1997–98 rate increase continues in the years 1999–2002, referral numbers in 2002 will be 12.6 per cent above the 1998 GPRD-based estimate.

By applying the 1998 GPRD referral rates to population projections for 1999–2002, we are making the assumption that referral rates will not continue increasing. As discussed above there has been a trend of increasing referral rates over the period 1994–98. Thus if the upward trend was to continue until 2002, by applying the 1998 rates we have calculated cautious estimates of the number of referrals. However, the most recent national data show a slowing down of the upward trend so

the baseline projections (assuming no increase in referral rates from 1998) are in fact likely to be our best estimate of future numbers of referrals. Even these figures would mean a year on year increase in referral numbers with consequent extra pressures on health services.

Orthopaedics, dermatology and ophthalmology have all seen increases in referral rates between 1994 and 1998. These three specialties have waiting times among the longest and the NHS plan promises to target these areas. Considerable extra resources have been committed to improving waiting times but the NHS Plan notes “.. it will take time to get the right supply of consultants and other staff into each specialty.” However, our analysis suggests that in the very short term, while these resources are put in place, there will be extra pressure on hospital services due to more referrals from GPs. Further research is needed to explain why referrals have risen. Increased disease prevalence and availability of new treatments are trends likely to continue leading to greater demand on the NHS.

## Key findings

- GP outpatient referral rates rose between 1994 and 1998, by 6.5 per cent for females and 2.6 per cent for males.
- Increases in referral rates were largest in the older age groups. Referral rates for children and young adults either decreased or rose slightly.
- Comparison of GPRD-based estimates of referral numbers with national KH09 data shows that GPRD data are consistent with national sources.
- If the referral rate remained constant between 1998 and 2002, the number of referrals in 2002 would still be 2.2 per cent higher than in 1998.

## References

1. Department of Health. *Waiting times for first outpatient appointments in England: Detailed Statistics, Quarter Ended 31 December 2000*.
2. Department of Health. *The NHS Plan: A Plan for Investment. A Plan for Reform*. TSO (London:2000).
3. Office for National Statistics. *Key Health Statistics from General Practice 1998*. Series MB6 No2. Office for National Statistics (London: 2000).
4. Hollowell J. The General Practice Research Database: quality of morbidity data. *Population Trends* 87 (1997), 36–40.
5. Jick H, Jick SS and Derby LE. Validation of information recorded on a general practitioner based computerised data resource in the United Kingdom. *British Medical Journal* 302 (1991), 766–768.
6. Nazareth I, King M, Haines A, Rangel L and Myers S. Accuracy of diagnosis of psychosis on a general practice computer system. *British Medical Journal* 307 (1993), 32–34.
7. Department of Health. *Outpatient and ward attenders, England, KH09*.

# Are unascertained deaths the same as sudden infant deaths?

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**This article investigates the decrease in the sudden infant death rates during the period 1993 to 1999. This was accompanied by an increase in unascertained death rates. It examines whether this was a coincidence or whether the two were related because of improvements in diagnosis of cause of death or change in certification practice.**

**The article concludes that although there are some similarities in the type of babies who die from sudden infant deaths and unascertained deaths, there are several fundamental differences. On this evidence it does not seem sensible to combine figures for unascertained deaths and sudden infant deaths. However, it is not possible to tell from the statistics whether there has been a change in the number of cases referred to the coroner and hence certified to sudden infant deaths or unascertained deaths. More research needs to be done on cases referred to coroners.**

## BACKGROUND

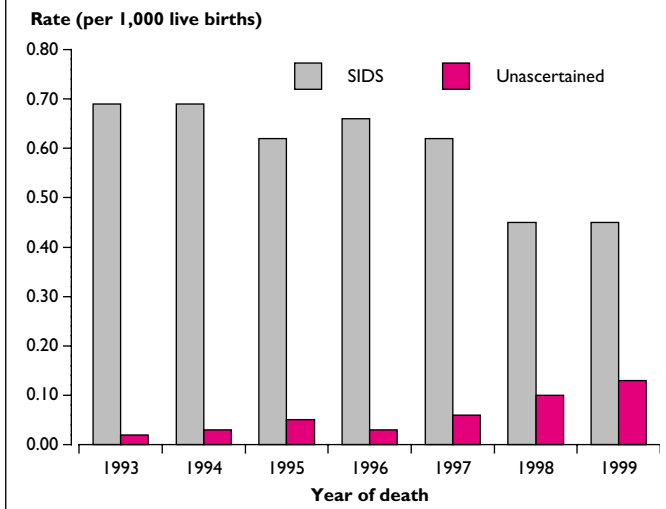
This article investigates the decrease in the sudden infant death rates during the period 1993 to 1999. This was accompanied by an increase in the unascertained death rates. It examines whether this was due to improved diagnosis of cause of death or change in certification practice or just a coincidence. The Foundation of the Study of Infant Deaths (FSID)<sup>1</sup> have, for example, argued that increasing number of baby deaths are being registered as ‘unascertained’ that were previously registered as ‘sudden infant death’.

‘Sudden infant death’ was recognised as an entity in the early 1960s and defined in 1969 as ‘the sudden unexpected death of any infant or young child which is unexpected by history and in which a thorough postmortem examination fails to demonstrate an adequate cause of death’.<sup>2</sup> This definition was revised in 1989 by the US National Institute of Health to include only infants dying suddenly under 1 year of age.<sup>3</sup> Sudden infant death, sudden unexpected death in infancy, Sudden Infant Death Syndrome (SIDS) or some other similar term are identified by the automatic cause coding system used by the Office for National Statistics (ONS) and coded to the International Classification of Diseases (ICD) ninth revision code 798.0. Since 1971, ONS and formerly the Office of Population, Censuses and Surveys (OPCS) published sudden infant death figures in DH3 monitors. Since 1999 they have been published as reports in the autumn edition of *Health Statistics Quarterly*.<sup>4</sup>

The term ‘unascertained’ is used by pathologists when the death does not fulfil the criteria used for sudden infant deaths and doubt remains about its cause. The coroner therefore holds an inquest to investigate the circumstances of the death further. At the end of the inquest he may reach a verdict that the death was due to natural causes or an accident, or may reach an ‘open’ verdict.

ONS codes deaths due to ‘other unknown and unspecified cause’, which includes deaths for which the cause was unascertained, to ICD 799. Figures on postneonatal deaths (those at ages 28 days and over but less than one year) with ICD 799 as the underlying cause are published in the ONS reference volume *Mortality statistics: Childhood, infant and perinatal*. Series DH3.

**Figure 1** Sudden infant death and unascertained death rates in England and Wales, 1993–99



In 1986 a separate neonatal death certificate was introduced in England and Wales covering all deaths under 28 days of life. This allows equal weighting to be given to the main conditions in the neonate and in the mother. It is therefore no longer possible to identify a single underlying cause of death for neonates. Hence the number of sudden infant deaths or unascertained deaths in neonates since 1986 can only be produced by identifying any mention on the death certificate of the terms sudden infant death, sudden unexpected death in infancy, Sudden Infant Death Syndrome (SIDS) or unascertained.

**CERTIFICATION AND REGISTRATION**

Deaths that are not due to natural causes or where the cause of death is not known must be referred to the coroner for further investigation.<sup>5</sup> In such cases the coroner may order a post-mortem and then holds an inquest. Any sudden infant death or unascertained death falls into this category; in virtually all such deaths the coroner orders a post-mortem. The coroner uses information from the post-mortem and any additional information available to decide the cause of death and to give a verdict if an inquest was held. The coroner then certifies the death and sends a certificate to the registrar of births and deaths who completes the death registration. A copy of the registration form is then sent to ONS by the registrar.

In England and Wales, information on birthweight, age of mother at birth of child, country of birth of mother, marital status of parents and whether the birth was a singleton or multiple are recorded at birth registration. This information is not collected at death registration. For this reason, the ONS has linked the death records of infants to their

corresponding birth records since 1975. The effect of some key risk factors for infant and perinatal mortality can be assessed.<sup>6</sup>

**METHODS**

ONS maintains a ‘live’ database of all deaths registered in England and Wales, which have occurred since 1 January 1993. This is continually updated and amended as further information becomes available. Analysis presented in this article is based on information collected at birth and death registration of infants (under 1 year of age) certified as sudden infant deaths or unascertained deaths in England and Wales between 1993 to 1999. For this purpose, all infant deaths that had any mention of 798.0 (sudden infant death) or 799.6, 799.7 or 799.9 (unascertained cause of death) that occurred in England and Wales during these years were extracted from the database. For the analysis, only unascertained deaths where there was no mention of any other cause on the certificate was used. Since 1993 birth records have been linked to any subsequent death. This facility was used to obtain mother’s age from the information at birth for all infant deaths used in the analysis.

Region of residence was used in the analysis to see if unascertained deaths occurred in specific regions of the country as a result of change in coroner’s practice. In the past, analysis of sudden infant deaths have showed that important differentials existed by age, social class, sex and mother’s age.<sup>7</sup> Hence these were also examined for unascertained deaths to see whether the same differentials existed.

**RESULTS**

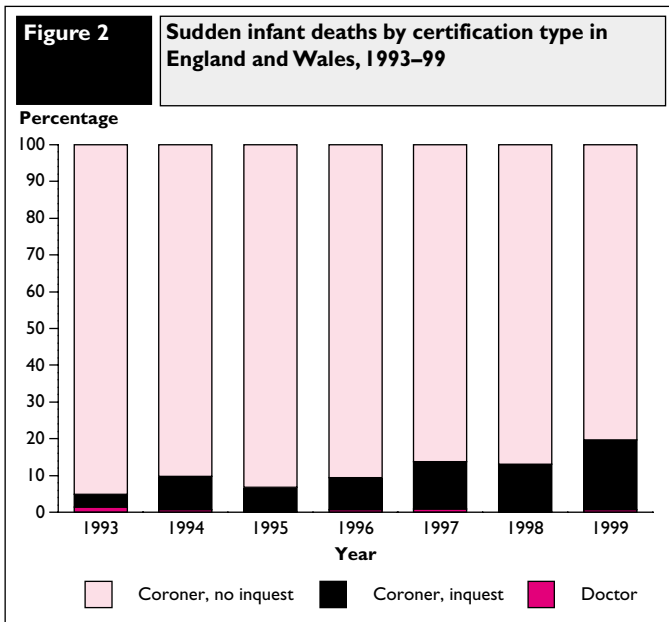
**Trends**

There was a downward trend in the sudden infant death rates between 1993 to 1999. The largest decrease occurred between 1997 and 1998, as shown in Figure 1. This decrease was studied in detail for postneonatal deaths (i.e. deaths at ages 28 days and over but under one year) with sudden infant death as the underlying cause of death.<sup>6</sup> The sudden infant death rate in 1993 was 0.69 per 1,000 live births (460 deaths) and it decreased by 35 per cent to 0.45 per 1,000 live births (289 deaths) in 1998, the same rate as in 1999. In comparison, the unascertained death rate slowly but steadily increased during this period. The largest increase occurred between 1997 and 1999. The unascertained death rate in 1993 was 0.02 per 1,000 live births (13 deaths) and it increased to 0.13 per 1,000 live births (79 deaths) in 1999. The rate for unascertained deaths in 1999 was over 6 times the rate in 1993. The unascertained death rate during the period 1993 to 1999 was 0.06 per 1,000 live births compared to the sudden infant death rate over the same period of 0.60 per 1,000 live births.

The results below show the key differences and similarities found in sudden infant deaths and unascertained deaths. These are summarised in Table 1.

**Table 1** Summary of results

	Sudden infant deaths	Unascertained deaths
Certification type	80 per cent certified by coroner without an inquest	90 per cent certified by a coroner with an inquest
Age at death	Common if under 28 days	Common if 28 days and over but less than 2 months
Sex	Highest for boys	Highest for boys
Mother’s age	Highest for mothers under 20	Highest for mothers under 20
Social classes	High for manual classes	High for manual classes
Region of residence	Highest in North West region	Highest in Wales



**Certification**

Figure 2 shows that in 1993, 95 per cent of sudden infant deaths were certified by a coroner without an inquest and this decreased to 80 per cent in 1999. The percentage of sudden infant deaths certified by a coroner with an inquest increased from 3.5 per cent in 1993 to 19 per cent in 1999. Between 1993 and 1999 less than 2 per cent of the sudden infant deaths were certified by the doctor.

In comparison, Figure 3, shows that in 1993, 85 per cent of the unascertained deaths were certified by a coroner with an inquest and this increased to 91 per cent in 1999. Between 1993 to 1999, 5–19 per cent of unascertained deaths were certified by a coroner without an inquest. In 1994, 12 per cent of the unascertained deaths were certified by a doctor compared to 1 per cent in 1999.

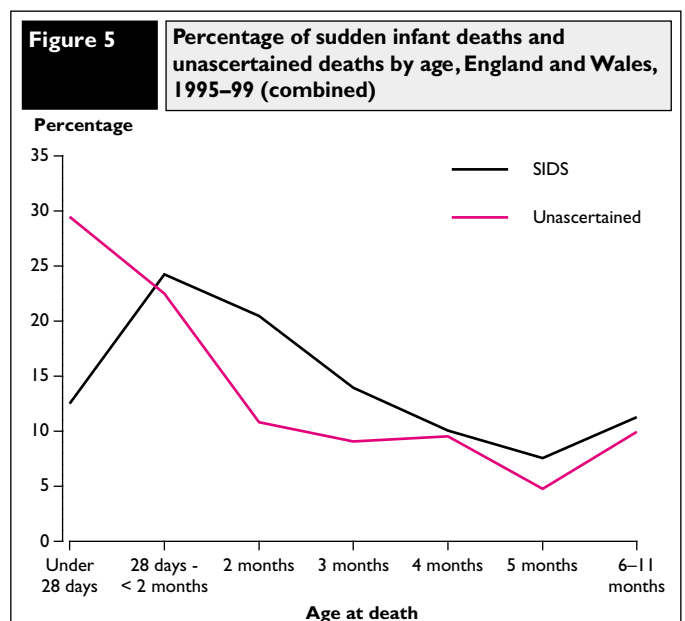
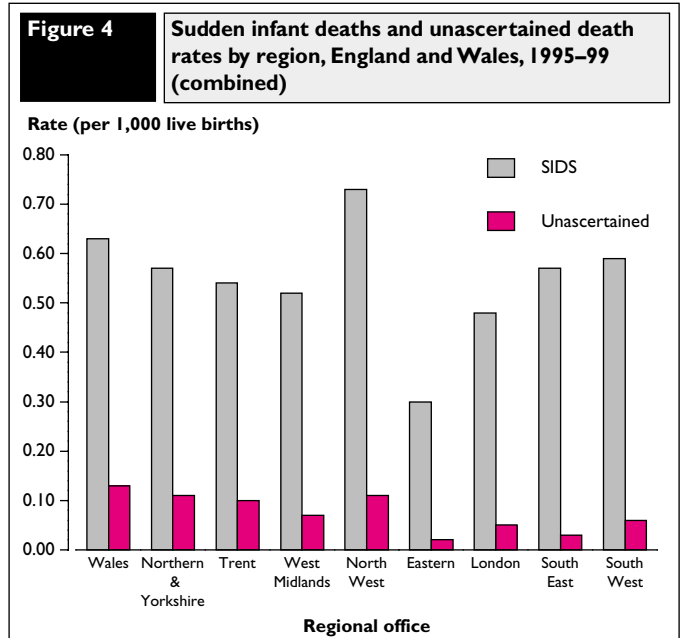
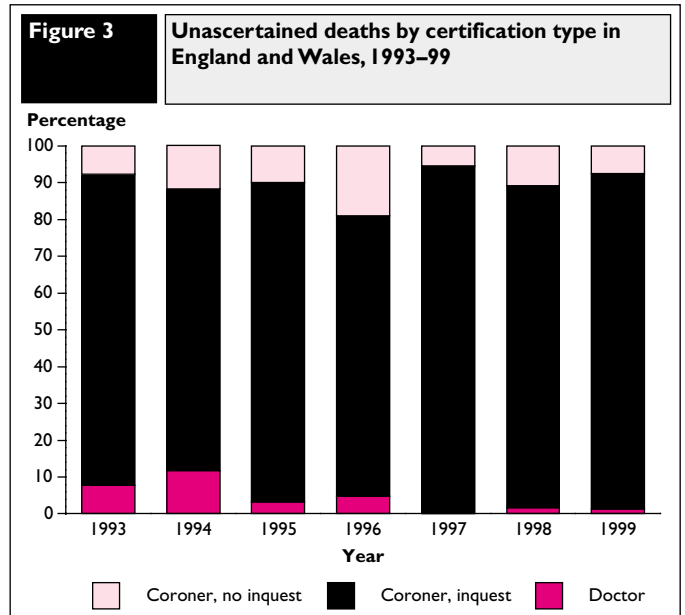
**Region of residence**

There were a number of NHS regional office boundary changes between 1993 to 1999. In order to analyse sudden infant deaths and unascertained death rates by region all the data were coded to 1999 NHS regional office boundaries. The number of unascertained deaths by region for 1993 and 1994 were too small to include in the analysis. Therefore, number of sudden infant deaths and unascertained deaths were combined for the 5 years 1995–99 to calculate rates by region. The sudden infant death rate was highest in the North West region and unascertained death rate was highest in Wales. This is shown in Figure 4.

Sudden infant death rates and unascertained death rates followed a similar pattern in all regions except for in the South East. In this region the unascertained death rate was lower than expected.

**Age at death**

In the period 1995–99, the highest percentage of unascertained deaths occurred among babies aged under 28 days whereas the highest percentage of sudden infant deaths occurred among babies aged 28 days and over but less than 2 months, as shown in Figure 5. Fifty-two per cent of unascertained deaths and 37 per cent of sudden infant deaths occurred at ages less than 2 months.



**Table 2** Death rates by father's social class, England and Wales, 1993-99 (combined)

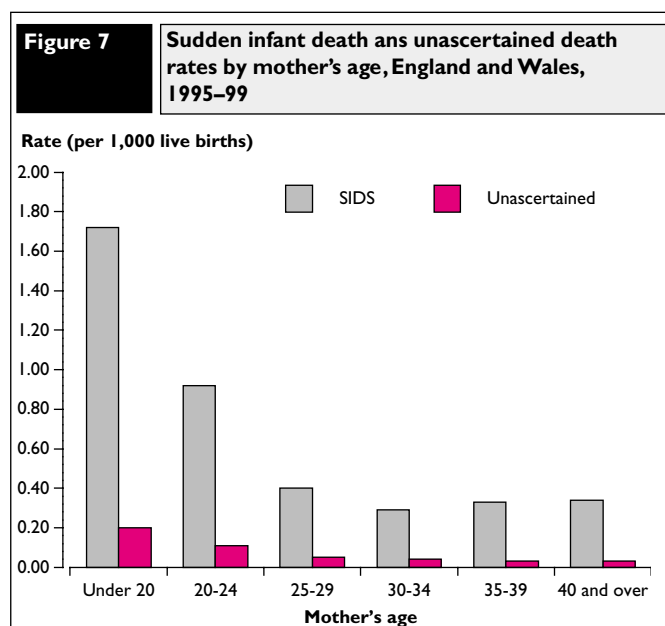
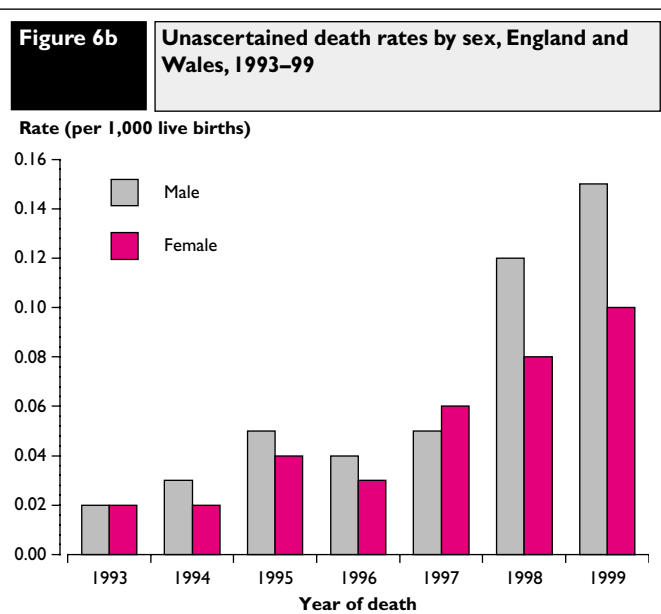
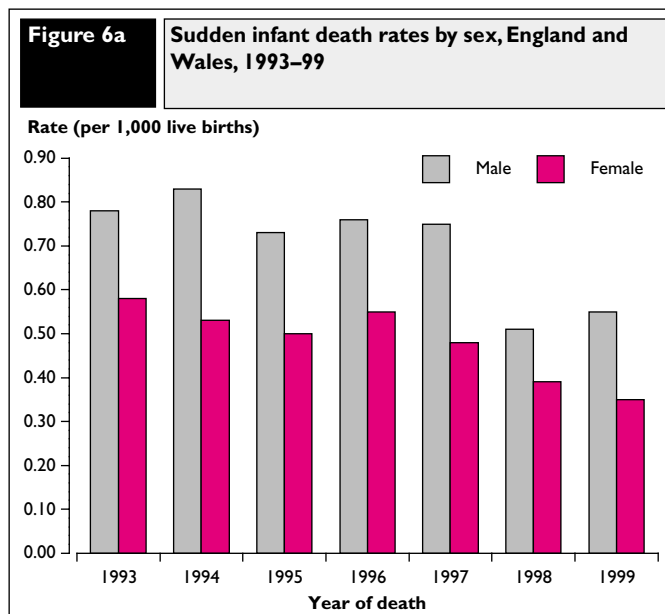
Sudden infant death rates	Number of deaths	Live births <sup>+</sup>	Rate per 1,000 live births
Father's social class			
Non-manual	555	180,809	0.31
Manual	1,463	216,203	0.68
Other*	362	21,723	1.67

Unascertained death rates	Number of deaths	Live births <sup>+</sup>	Rate per 1,000 live births
Father's social class			
Non-manual	35	180,809	0.02
Manual	113	216,203	0.05
Other*	57	21,723	0.26

<sup>+</sup> Social class (based on father's occupation) is derived for only a 10 per cent sample of live births (for inside marriage and outside marriage/joint registration only).

\* Includes armed forces, full time students, occupations inadequately described or no occupation.



**Social class**

Sudden infant death rates and unascertained death rates both varied by social classes. For manual social classes (IIIM, IV and V) both rates were more than double those for non-manual social classes (I, II and IIIN), as shown in Table 2.

For both sudden infant deaths and unascertained deaths the rate was highest where the father could not be classified to a social class I to V, because he was either in the armed forces, permanently sick, had no previous occupation or the occupation was inadequately described.

**Sex**

For both sudden infant deaths and unascertained deaths, rates were higher for boys than girls as shown in Figure 6. However, in 1993 and 1997 the unascertained death rates were slightly higher for girls than boys but these two increases were not statistically significant from those in other years.

**Mother's age**

Sudden infant death rates and unascertained death rates for the period 1995-99 were highest for children of mothers aged under 20. Figure 7 also shows that both the sudden infant death rate and unascertained death rate decreases with mother's age up to age 35. For mothers aged 35 and over, the number of unascertained deaths were too small for the rates to be meaningful.

## DISCUSSION

Analysis of sudden infant deaths and unascertained deaths by certification type showed that over 80 per cent of sudden infant deaths were certified by a coroner without an inquest whereas over 75 per cent of unascertained deaths were certified by a coroner with an inquest. Sudden infant death is acceptable as a natural cause of death whereas for unascertained death there is some evidence or doubt which often results in an open verdict. However, deaths of babies certified as unascertained or unknown cause are becoming more common now than in the past and the number of sudden infant deaths are falling.

Unascertained deaths are more common in babies aged under 28 days whereas sudden infant deaths are more common in babies aged 28 days and over but less than 2 months.

Both the sudden infant death rates and unascertained death rates follow a similar pattern by mother's age, sex, social class and region of residence. This suggests that some sudden infant deaths are being certified as unascertained due to improved diagnosis from post-mortem. Analysis of postneonatal deaths by underlying cause of death in 1997 and 1998 showed that the largest decrease in the sudden infant death rates were accompanied by an increase in death rates for other causes such as diseases of the circulatory system, diseases of the digestive system, infectious diseases, and other unknown and unspecified cause which includes unascertained.<sup>7</sup>

## CONCLUSION

Although there are some similarities in the type of babies who die from sudden infant deaths and unascertained deaths, there are several fundamental differences (as shown in Table 1). On this evidence it does not seem sensible to combine figures for unascertained deaths and sudden infant deaths. However, it is not possible to tell from the statistics whether there has been a change in the number of cases referred to the coroner and hence certified to sudden infant deaths or unascertained deaths. More research needs to be done on cases referred to coroners.

## REFERENCES

1. The Foundation for the Study of Infant Deaths. *Leading cot death charity questions validity of Government cot death statistics*. Press release ref:13/00. 24 August 2000.
2. Discussion of terminology of sudden infant death syndrome. In: *Proceedings of the second International conference on 'Causes of Sudden Infant Death'*. University of Washington Press (Seattle: 1970), 17–18.
3. Zylke J W. Sudden infant death syndrome: resurgent research offers hope. *Journal American Medical Association* 262 (1989), 1565–6.
4. Sudden infant deaths 1999. *Health Statistics Quarterly* 07 (2000), 66–70.
5. Devis T and Rooney C. Death certification and the epidemiologist. *Health Statistics Quarterly* 01 (1999), 21–32.
6. Infant and perinatal mortality by social and biological factors, 1999. *Health Statistics Quarterly* 08 (2000), 76–80.
7. Dattani N and Cooper N. Trends in cot deaths. *Health Statistics Quarterly* 05 (2000), 10–16.

# The calculation of abortion rates for England and Wales

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## INTRODUCTION

Statistics on the number of legal abortions performed in England and Wales under the 1967 Abortion Act are published quarterly in *Health Statistics Quarterly*, and annually in the Abortions Annual Reference Volume, Series AB1.<sup>1</sup> Abortion rates are also published to show the number of abortions per 1,000 women in different age groups. The all age abortion rate, the number of abortions per 1,000 women aged 14–49, has been used to compare levels of abortion over time. It is also used to compare levels of abortion in different parts of England and Wales. This article discusses the arguments for making two changes to the calculation of abortion rates: changes to the calculation of age specific abortion rates and the calculation of age-standardised abortion rates.

## CHANGING THE AGE GROUPS USED IN THE CALCULATION OF ABORTION RATES

Each abortion rate is the number of abortions in a specific age group (the numerator) divided by the number of women at risk of an abortion (the denominator). This fraction is then multiplied by 1,000 to give a rate per 1,000 women. For example the abortion rate for 20–24 year olds is 1,000 multiplied by the number of abortions to women aged 20–24 resident in England and Wales divided by the population of women aged 20–24 resident in England and Wales. However for young women, and older women the ages of the population at risk may not exactly coincide with the ages of women having an abortion. Historically, for example, the abortion rate for women over 40 is 1,000 multiplied by the number of abortions to all women over 40 divided by the population of women aged 40–49.

The National Statistics on abortions, conceptions and births have been developed independently, so that in some cases the age groups used for

Abortion rates are used to monitor changes in levels of abortion over time. The all age abortion rate measures the overall level of abortion in a population, and age-specific rates the level in different age groups. This article examines how figures based on the current definition of age-specific abortion rates differ from those based on definitions consistent with statistics on conceptions and births. It then compares all age abortion rates with age-standardised rates which take account of differences in the age distribution of the population over time and between geographical areas.

the population denominators are inconsistent. Nearly 90 per cent of abortions occur before 13 weeks gestation. So women having an abortion will typically be less than 3 months older than when they conceived. All women at risk of conceiving a child are at risk of having an abortion. This means that the age groups used for the population denominators for abortion rates should be the same as those used for conception rates. They should also be similar to age groups used in calculating birth rates. The one exception is the birth rate for girls under 16. In 1999 there were 1,471 live births to girls under 16, only 39 of which were to girls under 14. The risk of girls under 14 having a baby is much lower than the risk for 14 and 15 year-olds. For this reason the population denominator for the under 16 birth rate is the number of girls aged 14 and 15.

Table 1 shows the current age groups used in calculating abortion, conception and birth rates, and the proposed alternative age groups for abortion rates.

Abortion statistics confirm that relatively few women aged 45–49 have an abortion in England and Wales. In 1999 there were 5,755 abortions to women aged 40–44 resident in England and Wales but only 502 to

women aged 45 and over. The population estimates for these age groups were 1,769,000 and 1,681,000. If all women aged 40–49 are included in the population denominator the abortion rate for women aged 40 and over would be 1.8 per 1,000. This is just under half the rate for women aged 40–44 based on a population denominator of women aged 40–44 (3.3 per 1,000). It is six times higher than the rate for women aged 45–49 (0.3 per 1,000). Restricting the population denominator to women aged 40–44 would provide a more accurate estimate of the risk of women in that age group having an abortion.

The all age-abortion rate is currently calculated assuming that women aged 14–49 are at risk of having an abortion. This is not consistent with what is assumed in published all age conception and birth rates. Using the number of women aged 15–44 as the population denominator would also make it easier to compare abortion rates in England and Wales with those in other countries. For example, the Alan Guttmacher Institute used the 15–44 age group as a population denominator in its recent international comparison of abortion rates.<sup>2</sup>

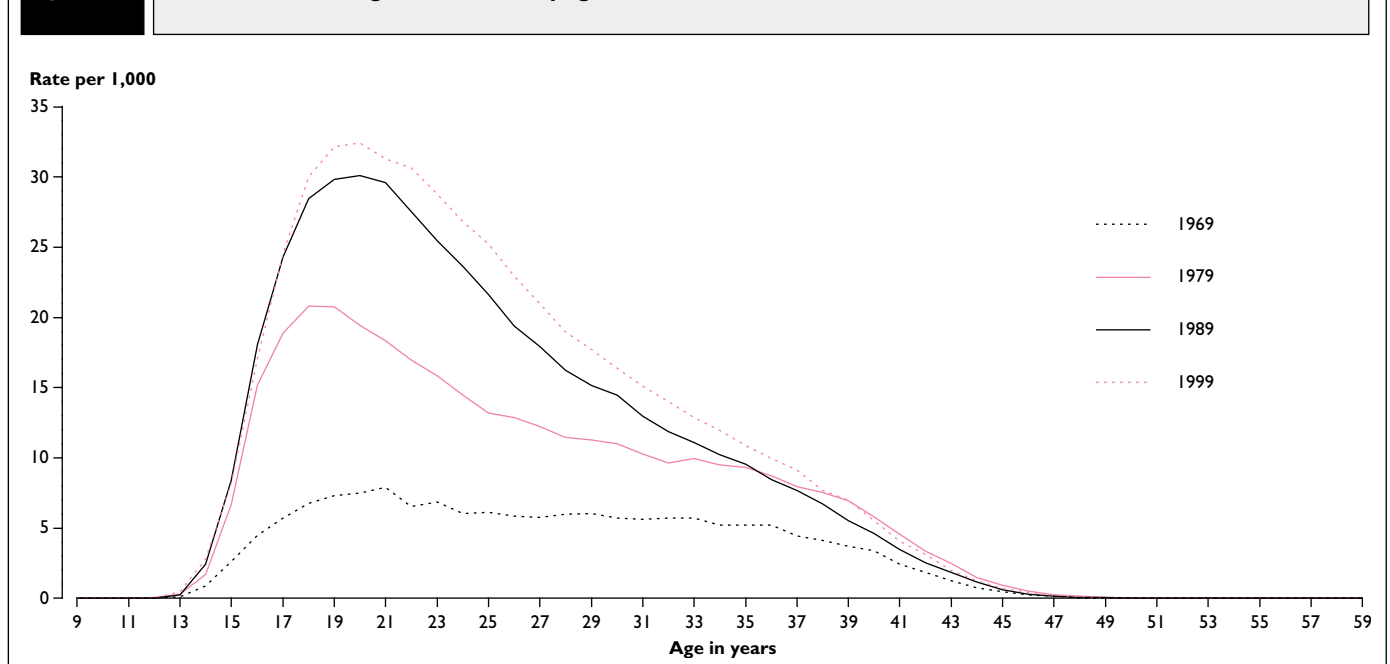
Rates based on a reduced age range (under 18, under 20, 40 and over, all ages in the population denominator) would be higher using the

**Table 1** Population denominators used to calculate abortion rates

Age specific rate	Abortions included <sup>1</sup> in rate	Population denominators used				Abortion rate per 1,000 in 1999	
		Current abortion statistics	Conception statistics	Birth statistics	Alternative abortion statistics	Current	Alternative
under 16	All to under 16s	14–15	13–15	14–15	13–15	5.7	3.8
under 18	All to under 18s	14–17	15–17	15–17	15–17	13.2	17.7
under 20	All to under 20s	14–19	15–19	15–19	15–19	19.2	23.2
16–19	Abortions to 16–19s	16–19	Not used	Not used	16–19	26.0	26.0
40 and over	All to women aged 40 and over	40–49	40–44	40–44	40–44	1.8	3.5
All ages	All abortions	14–49	15–44	15–44	15–44	13.6	16.1

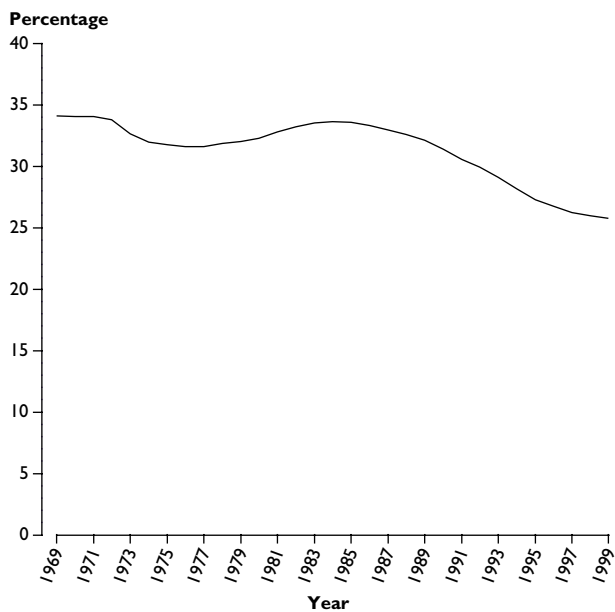
<sup>1</sup> Abortions to residents of England and Wales.

**Figure 1** Abortion rates in England and Wales by age of woman, 1969, 1979, 1989 and 1999



**Figure 2**

**Population of women aged 17–25 as a percentage of the population aged 15–44 Residents of England and Wales**



alternative definition. Those where the age range in the denominator has been expanded (under 16) would be lower.

### STANDARDISING THE ALL AGE ABORTION RATE

The abortion rate varies considerably by age, peaking in 1999 at around age 20 and remaining at two-thirds peak rate or higher throughout the age range 17–25 years. This pattern has remained fairly stable since the mid-1970s (Figure 1).

The peaked nature of the age distribution means that trends in the all-ages abortion rate (whether calculated using as denominator the population aged 14–49 or 15–44) can be misleading at times when the proportion of women in the peak age range 17–25 is changing. After remaining moderately stable in the 1970s and 1980s, this proportion has been falling in the 1990s (Figure 2).

One way of taking these population shifts into account is to standardise the rate. A fixed population distribution is selected and, by applying any given year's age-specific rates to the fixed population distribution, a standardised rate can be calculated. This is the rate that would have been observed, given the age-specific rates, had the population distribution by age not changed. Standardisation may be by single years of age or by e.g. 5-year age groups. This section of the report examines the standardised rate obtained using two fixed populations by single years of age and one of them also by 5-year age groups.

A commonly selected fixed population distribution is the mid-year estimate for the 'current' data year, answering the question "what would the rate have been in previous years if the population age distribution then had been as it is now?". Whilst superficially attractive, this approach requires re-calculation each year of all past years' rates, resulting in an unstable historical time series. This option has not been further explored.

The option of using the base year of the time series – e.g. in this instance 1968, the first year of operation of the Abortion Act – would

answer the question "what would this year's rate be if the population age distribution was still the same now as it had been at the start?". As time goes on, the relevance of this decreases and at 30 years distance may be considered negligible. Although this option does not require the re-calculation of historical data each year, it too has not been explored further.

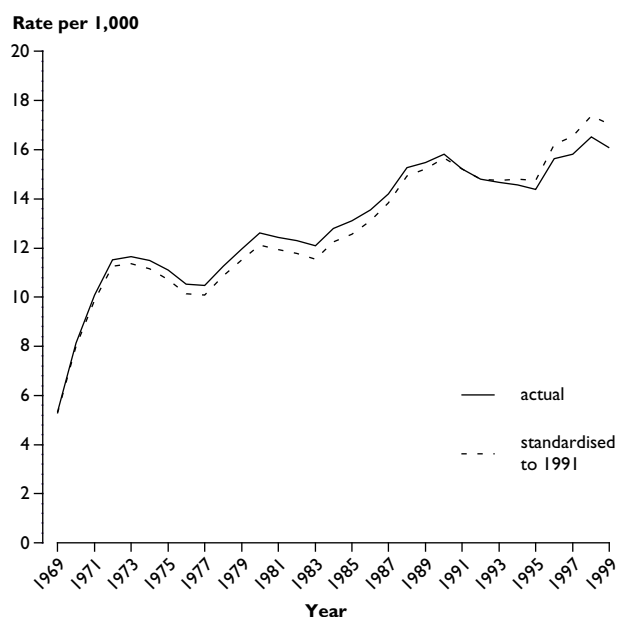
Another commonly used fixed population distribution is that of the most recent census year. This has the advantage over the current-year option of requiring change to the historical series only every 10 years but this still results in a degree of instability and could be sensitive to unusual age distributions in census years. This standardised rate has been calculated, using single years of age. Comparison with the actual rates in Figure 3 shows the standardised rate somewhat lower than the actual prior to 1991 but higher thereafter.

A further possibility is to use some agreed arbitrary population age distribution. This would have the big advantage of stability and comparability, though it may be more difficult to visualise. Such a population has been adopted for the calculation of standardised mortality and other rates across the EU – the European Standard Population (EuSP).<sup>3</sup> The EuSP is also used to calculate age-standardised National Statistics for cancer incidence and mortality within the United Kingdom<sup>4,5</sup> and cause specific mortality in England and Wales.<sup>6</sup> Over virtually the whole of the age range of women terminating pregnancies, the EuSP assumes equal populations at each single year of age. This greatly simplifies the calculation process. Comparison of actual rates with those standardised to the EuSP shows a similar pattern to that of standardisation to 1999, except that the divergence after 1991 is not as marked. The advantages of stability and comparability lead to the choice of the European Standard Population as the preferred option for the standardisation of abortion rates. These are shown in Figure 4 and Table 2.

Finally, comparison of standardisation using single years of age with that using 5-year age groups shows very similar rates throughout the period, with the 5-year based rate never more than 0.75 per cent higher or lower than the single year based rate. The 5-year based rate is the lower before 1980 and also from 1994 to date. The extra refinement of

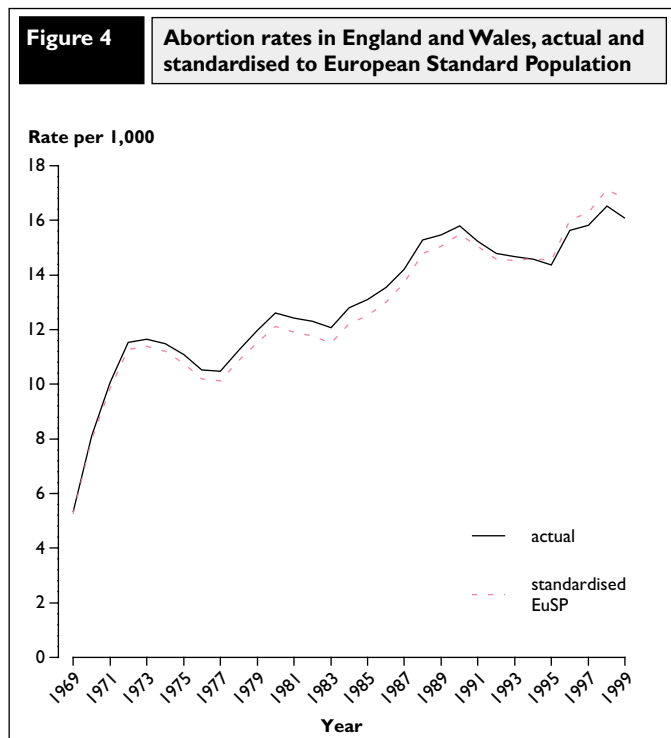
**Figure 3**

**All age abortion rates in England and Wales, actual and standardised to 1991 population distribution**



the single year base coupled with equal ease of calculation lead to this being the preferred option. Full details are given in Appendix 1.

Until 1994 the standardised rate was lower than the overall abortion rate (Figure 4 and Table 2). During this period the percentage of women aged 15–44 in the peak age range 17–25 was lower than 30 per cent (the percentage expected in the Standard European Population). Since then



**Table 2** Trends in all age abortion rates and standardised rate using the European Standard Population

Year	Published all age rate 14–49 population	All age rate 15–44 population	Standardised rate
1969	4.38	5.33	5.25
1970	6.72	8.12	7.97
1971	8.37	10.08	9.87
1972	9.61	11.53	11.27
1973	9.75	11.66	11.39
1974	9.63	11.49	11.20
1975	9.30	11.09	10.76
1976	8.86	10.53	10.19
1977	8.84	10.48	10.12
1978	9.53	11.26	10.87
1979	10.17	11.97	11.53
1980	10.76	12.61	12.12
1981	10.63	12.42	11.90
1982	10.56	12.31	11.76
1983	10.36	12.08	11.52
1984	11.00	12.80	12.21
1985	11.26	13.11	12.52
1986	11.69	13.54	13.01
1987	12.30	14.21	13.72
1988	13.22	15.28	14.80
1989	13.36	15.48	15.06
1990	13.61	15.81	15.50
1991	13.06	15.23	15.04
1992	12.51	14.79	14.59
1993	12.30	14.67	14.54
1994	12.18	14.58	14.60
1995	11.99	14.38	14.54
1996	13.03	15.63	16.00
1997	13.28	15.82	16.30
1998	13.92	16.52	17.13
1999	13.57	16.09	16.79

the percentage in the peak age range has fallen below 30 per cent (Figure 2) and the standardised EuSP rate has risen above the raw abortion rate.

**IMPACT OF STANDARDISATION ON THE ANALYSIS OF ABORTION RATES IN DIFFERENT HEALTH AUTHORITY AREAS**

The risk of a woman having an abortion varies considerably across England and Wales. The all age abortion rate has been used to compare the level of abortion in different parts of the two countries. Figure 5 shows the distribution of all age abortion rates (using 14–49 population denominator) for residents of health authorities in 1999.

The rates range from 8.1 per 1,000 in the Isle of Wight to 36.0 in Lambeth, Southwark and Lewisham, over two and a half times the rate for England and Wales as a whole. A woman’s area of usual residence is derived from the address she gave as her usual residence at the time of the abortion. Some women may have stated a temporary residence as their place of usual residence. This may inflate rates for health authorities where many abortions are performed. Over three quarters of health authorities had all age rates below the England and Wales all age abortion rate of 13.57 abortions per 1,000 women aged 14–49.

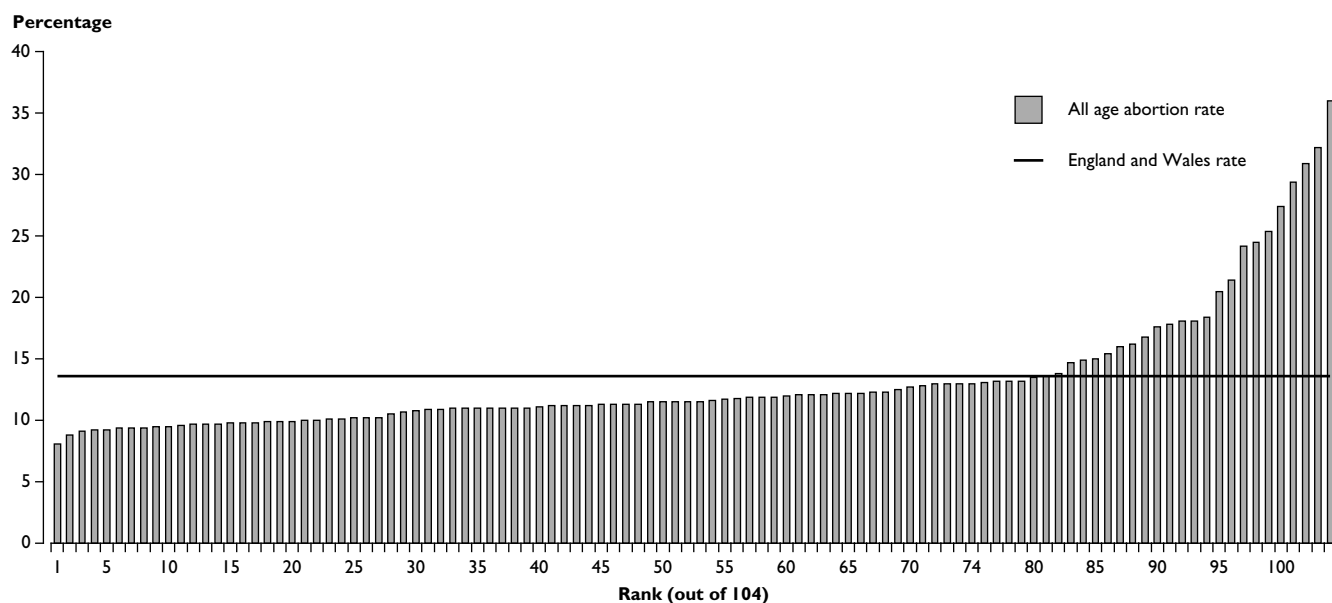
The next section examines the impact of the two proposed changes to abortion rates on rates for different health authorities.

The first change is the restriction of the ‘population at risk’ to women aged 15–44. Table 3 compares the overall abortion rate using the population of women aged 14–49 (column 2) with that calculated using only the population of women aged 15–44 (column 4). The relative change in the rate depends on the percentage of the population of women aged 14–49 in the 15–44 age group (column 3). Areas where this percentage is low, such as the Isle of Wight (81 per cent), show the greatest difference between the two rates (the new method gives a rate 23 per cent higher than the old). In contrast over 88 per cent of women aged 14–49 resident in Lambeth, Southwark and Lewisham and Kensington, Chelsea and Westminster are aged 15–44, so the difference between the two methods of calculating rates is much smaller.

The second change is the calculation of an age standardised rate to take account of the age distribution of the population of women aged 15–44. Areas where a high percentage of women aged 15–44 are aged 17–25 (the age groups with the highest age-specific abortion rates) are likely to have higher overall abortion rates than areas where there are relatively few women in these age groups. An age-standardised abortion rate is therefore a much better way of measuring the overall level of abortion to residents in an area. Table 3 also shows the percentage of women aged 15–44 in the 17–25 age group and the age standardised rate for health authority areas. The percentage change in the rates due to age standardisation varies from 7 per cent lower in Kensington, Chelsea & Westminster (where 33 per cent of women aged 15–44 are in the 17–25 age group) to 26 per cent higher in Herefordshire (where only 21 per cent of the 15–44s are in this age group). In general areas with younger populations are concentrated in London, other major cities and university towns. Age standardisation reduces the differences between abortion rates in these areas and areas with older populations.

Figure 6 shows the relationship between the overall abortion rate (using 14–49 population denominator) and the new standardised rate.

**Figure 5** All age abortion rates for residents of Health Authorities, England and Wales 1999



**Table 3** Legal abortions performed in England and Wales for residents of Health Authorities in 1999

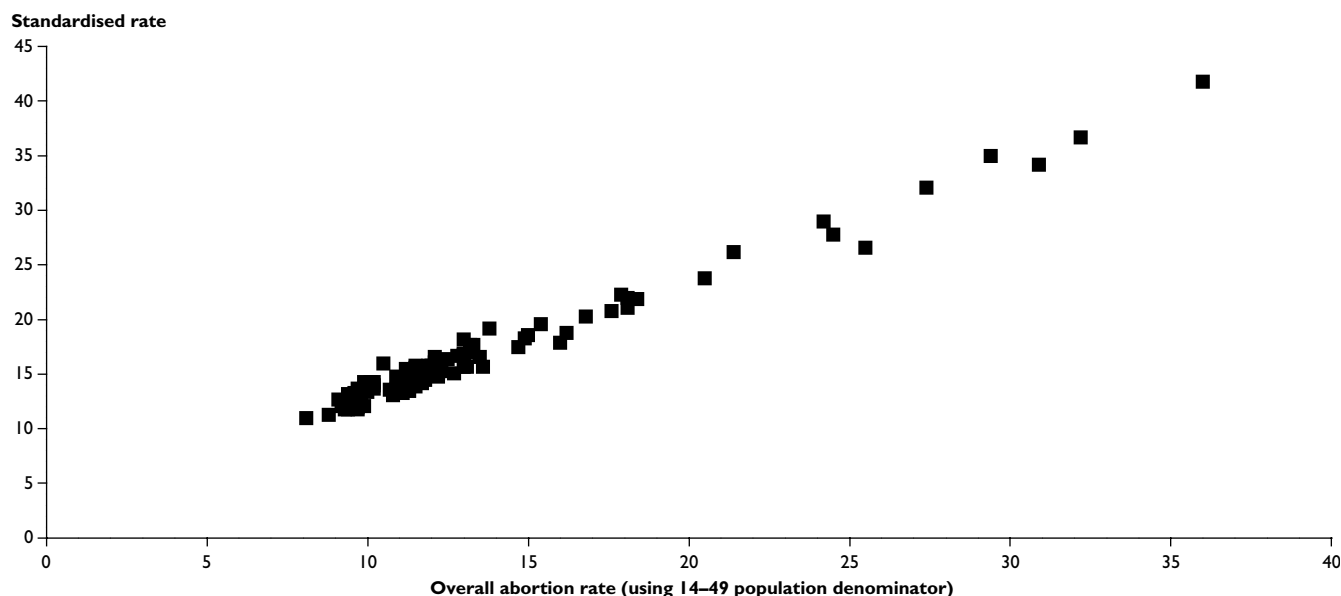
Health Authorities	Total number of abortions	Overall rate 14-49 population	% of 14-49s aged 15-44	Overall rate 15-44 population	% of 15-44s aged 17-25	Standardised rate
<b>England and Wales</b>	<b>173,701</b>	<b>13.6</b>	<b>84.3</b>	<b>16.1</b>	<b>25.8</b>	<b>16.8</b>
<b>England</b>	<b>166,106</b>	<b>13.7</b>	<b>84.4</b>	<b>16.2</b>	<b>25.7</b>	<b>16.9</b>
<b>Northern &amp; Yorkshire</b>	<b>16,546</b>	<b>10.8</b>	<b>83.9</b>	<b>12.9</b>	<b>26.4</b>	<b>13.6</b>
Bradford	1,282	10.8	84.8	12.7	28.4	13.0
Calderdale & Kirklees	1,608	11.3	84.1	13.4	26.1	13.9
County Durham	1,280	8.8	83.4	10.5	25.0	11.3
East Riding	1,504	11.2	83.4	13.5	27.5	14.1
Gateshead & South Tyneside	835	9.9	84.3	11.8	22.3	13.6
Leeds	2,301	12.7	85.7	14.9	31.0	15.2
Newcastle & North Tyneside	1,536	13.1	85.1	15.4	31.5	15.7
North Cumbria	737	10.1	82.7	12.2	22.1	14.3
North Yorkshire	1,625	9.4	82.6	11.4	23.7	12.6
Northumberland	685	9.4	81.5	11.5	23.0	13.2
Sunderland	876	12.2	83.9	14.5	29.0	15.1
Tees	1,537	11.2	84.0	13.4	25.5	14.3
Wakefield	740	9.6	83.8	11.4	21.6	13.3
<b>Trent</b>	<b>13,616</b>	<b>11.1</b>	<b>84.1</b>	<b>13.2</b>	<b>25.5</b>	<b>13.9</b>
Barnsley	543	9.9	84.5	11.8	20.5	14.3
Doncaster	952	13.8	83.5	16.6	21.9	19.3
Leicestershire	2,712	11.7	84.2	13.9	28.4	14.2
Lincolnshire	1,397	9.8	82.7	11.9	23.3	13.5
North Derbyshire	819	9.7	82.8	11.7	21.3	13.6
North Nottinghamshire	836	9.1	83.3	11.0	22.0	12.7
Nottingham	1,803	11.3	85.0	13.3	29.2	13.5
Rotherham	698	11.5	84.0	13.8	22.5	15.8
Sheffield	1,567	12.2	85.9	14.3	30.8	14.7
South Humber	940	13.0	83.2	15.6	22.3	18.2
Southern Derbyshire	1,349	9.8	84.6	11.6	24.8	12.3
<b>Eastern</b>	<b>14,495</b>	<b>11.2</b>	<b>84.1</b>	<b>13.3</b>	<b>24.3</b>	<b>14.1</b>
Bedfordshire	1,874	13.2	84.7	15.6	23.6	17.0
Cambridgeshire	1,785	9.7	84.5	11.5	25.7	12.0
East & North Hertfordshire	1,494	12.2	84.9	14.3	23.8	15.2
Norfolk	1,721	9.6	82.9	11.6	24.8	12.4
North Essex	2,355	11.0	83.7	13.2	25.1	13.8
South Essex	2,231	13.0	84.3	15.4	23.6	16.8
Suffolk	1,423	9.2	83.4	11.0	23.7	12.1
West Hertfordshire	1,612	12.1	84.6	14.3	23.0	15.5

**Table 3**  
**continued****Legal abortions performed in England and Wales for residents of Health Authorities in 1999**

Health Authorities	Total number of abortions	Overall rate 14-49 population	% of 14-49s aged 15-44	Overall rate 15-44 population	% of 15-44s aged 17-25	Standardised rate
<b>London</b>	<b>48,361</b>	<b>24.8</b>	<b>86.9</b>	<b>28.5</b>	<b>27.4</b>	<b>28.6</b>
Barking & Havering	1,650	17.9	84.5	21.1	25.1	22.3
Barnet	1,625	18.1	86.3	21.0	28.2	21.2
Bexley & Greenwich	1,988	18.1	85.4	21.2	26.7	22.0
Brent & Harrow	3,548	29.4	85.7	34.3	26.7	35.0
Bromley	1,079	14.9	84.6	17.6	25.5	18.3
Camden & Islington	3,313	30.9	88.0	35.1	32.7	34.2
Croydon	1,883	21.4	85.4	25.0	25.0	26.2
Ealing, Hammersmith & Hounslow	4,656	24.5	87.6	28.0	27.4	27.8
East London & The City	5,444	32.2	87.7	36.7	28.6	36.7
Enfield & Haringey	3,542	27.4	86.5	31.7	27.2	32.1
Hillingdon	1,158	17.6	86.4	20.4	27.1	20.8
Kensington, Chelsea & Westminster	3,063	25.5	88.7	28.7	32.8	26.6
Kingston & Richmond	1,239	13.6	85.8	15.8	28.4	15.7
Lambeth, Southwark & Lewisham	7,751	36.0	88.7	40.6	26.0	41.8
Merton, Sutton & Wandsworth	3,610	20.5	87.9	23.3	25.7	23.8
Redbridge & Waltham Forest	2,812	24.2	85.5	28.3	26.0	29.0
<b>South East</b>	<b>24,719</b>	<b>11.7</b>	<b>84.0</b>	<b>14.0</b>	<b>24.9</b>	<b>14.8</b>
Berkshire	2,797	13.5	85.1	15.9	24.9	16.6
Buckinghamshire	2,082	11.9	83.7	14.2	23.2	15.6
East Kent	1,316	9.5	83.6	11.4	25.6	11.9
East Surrey	1,109	10.9	82.4	13.2	22.4	14.8
East Sussex, Brighton & Hove	2,603	15.0	83.8	17.9	26.1	18.6
Isle of Wight	211	8.1	81.0	10.0	23.2	11.0
Northamptonshire	1,777	11.5	83.5	13.8	25.3	14.6
North & Mid Hampshire	1,323	9.4	83.9	11.2	24.8	11.8
Oxfordshire	1,770	11.1	85.0	13.1	27.9	13.3
Portsmouth & South East Hampshire	1,534	11.8	84.7	13.9	26.2	14.5
Southampton & South West Hampshire	1,429	11.0	83.9	13.1	27.1	13.6
West Kent	2,894	12.3	83.8	14.6	22.9	16.2
West Surrey	1,945	12.3	84.2	14.6	25.2	15.4
West Sussex	1,929	11.0	83.8	13.2	22.9	14.5
<b>South West</b>	<b>12,073</b>	<b>10.6</b>	<b>83.1</b>	<b>12.8</b>	<b>25.0</b>	<b>13.6</b>
Avon	2,816	11.5	84.7	13.6	28.1	13.9
Cornwall & Isles of Scilly	1,096	10.1	81.3	12.5	23.2	13.9
Dorset	1,709	11.2	82.7	13.5	24.4	14.5
Gloucestershire	1,435	11.0	82.9	13.3	23.5	14.5
North & East Devon	985	9.3	82.3	11.3	27.8	11.8
Somerset	1,104	10.0	82.0	12.2	23.0	13.8
South & West Devon	1,451	10.7	83.0	12.8	25.2	13.6
Wiltshire	1,477	10.0	83.8	11.9	22.4	13.4
<b>West Midlands</b>	<b>16,556</b>	<b>13.0</b>	<b>84.0</b>	<b>15.5</b>	<b>25.9</b>	<b>16.1</b>
Birmingham	4,108	16.2	86.2	18.8	30.4	18.8
Coventry	1,366	18.4	85.4	21.5	33.2	21.9
Dudley	881	12.1	83.7	14.5	22.1	16.6
Herefordshire	386	10.5	82.1	12.8	21.1	16.1
North Staffordshire	1,079	9.7	84.0	11.5	27.9	11.9
Sandwell	1,066	15.4	85.5	18.0	23.1	19.6
Shropshire	1,103	11.0	82.8	13.2	23.3	14.7
Solihull	492	10.2	82.7	12.4	22.2	13.7
South Staffordshire	1,611	11.5	82.6	13.9	22.5	15.5
Walsall	790	13.0	84.2	15.5	23.2	16.9
Warwickshire	1,535	12.8	82.9	15.4	24.0	16.7
Wolverhampton	842	14.7	84.7	17.4	33.1	17.5
Worcestershire	1,297	10.2	82.2	12.5	22.2	14.0
<b>North West</b>	<b>19,740</b>	<b>12.4</b>	<b>84.2</b>	<b>14.7</b>	<b>25.9</b>	<b>15.4</b>
Bury & Rochdale	1,050	11.0	84.2	13.0	23.5	14.2
East Lancashire	1,444	11.9	84.1	14.1	24.1	15.5
Liverpool	1,980	16.8	85.6	19.6	32.4	20.3
Manchester	1,814	16.0	87.7	18.2	38.5	17.9
Morecambe Bay	720	9.9	83.5	11.8	29.1	12.1
North Cheshire	1,023	13.2	83.9	15.7	23.1	17.7
North West Lancashire	1,226	11.6	84.3	13.8	25.7	14.6
Sefton	750	11.5	83.3	13.7	23.2	15.6
South Cheshire	1,722	11.0	82.8	13.3	24.6	14.3
South Lancashire	762	10.2	82.3	12.4	22.1	14.3
St Helens & Knowsley	1,023	12.5	84.4	14.8	23.4	16.4
Salford & Trafford	1,393	13.0	85.0	15.3	27.6	15.7
Stockport	941	13.3	83.3	15.9	22.8	17.7
West Pennine	1,368	11.9	84.3	14.1	22.6	15.8
Wigan & Bolton	1,584	11.3	84.4	13.4	22.8	15.0
Wirral	940	12.1	83.1	14.6	23.8	16.1
<b>Wales</b>	<b>7,595</b>	<b>11.1</b>	<b>83.1</b>	<b>13.4</b>	<b>26.5</b>	<b>14.0</b>
North Wales	1,783	12.0	82.5	14.6	24.5	15.8
Bro Taf	2,050	11.3	84.4	13.4	30.1	13.5
Dyfed Powys	1,046	9.8	81.8	12.0	26.4	12.6
Gwent	1,453	11.2	82.9	13.5	22.8	15.5
Morgannwg	1,263	10.9	83.2	13.1	27.3	13.6

Boundaries as at 1 April 1999.

**Figure 6** Relationship between standardised and overall abortion rates  
Health Authorities in England and Wales, 1999



Areas with high overall abortion rates have high standardised rates. The lowest standardised rate is 11.0 per 1,000 in the Isle of Wight, and the highest in Lambeth, Southwark and Lewisham at 41.8 per 1,000.

Standardised rates for individual areas will fluctuate from year to year even when the underlying abortion rates do not change. This is because they are the sum of observed age-specific abortion rates for relatively small populations of women. Health authorities with small populations of women at each age, such as Herefordshire and the Isle of Wight, will be the most affected by this annual variation.

## CONCLUSIONS

The current headline National Statistic on abortion is the all age abortion rate. This is the number of abortions performed under the 1967 Abortion Act in England and Wales per 1,000 women aged 14–49. There is a strong case for bringing this into line with other National Statistics on conceptions and births which use the population of women aged 15–44 in the denominator of the rate. In 1999 the all age abortion rate was 13.6 abortions per 1,000 women aged 14–49. Under the alternative definition the all age rate would be 18 per cent higher at 16.1 abortions per 1,000 women aged 15–44.

Age-standardisation is a useful way to overcome the effects of differences in age distributions of populations on all age abortion rates. Since the early 1990s the percentage of women aged 17–25, the age groups with the highest abortion rates, has fallen. The raw overall abortion rate slightly underestimated the increase in the abortion rate in the late 1990s. The impact of using an age-standardised rate rather than an all age rate is much smaller than the changes to the population denominator discussed above. The age-standardised rate using the EuSP is 16.8 abortions per 1,000 women aged 15–44 compared with 16.1 per 1,000 for the raw all age rate. Ignoring changes in the age distribution of the population and using raw all age rates does not have a large impact on short term trends in the abortion rate for England and Wales. Larger changes would be observed if there were major differences in population structure either in a single area over time or between different geographical areas. There would be some distortion when baby-boom populations pass through the ages with highest age-specific abortion rates. In the late 1990s the large population of women born in

## Key findings

- Changing the population denominator for the all age abortion rate from women aged 14–49 to those aged 15–44 would harmonise the population denominators used in the calculation of abortion, conception and birth rates.
- Age-standardisation would remove the effects of changes in the age distribution of the female population on overall abortion rates
- Age-standardised rates can also be used to compare abortion rates in areas with different age compositions.

the early 1960s baby boom moved out of the peak age groups for abortion causing the all age-abortion rate to fall below the age-standardised rate. Using all age rates to compare rates in populations with very different age distributions, such as those in inner cities with those in retirement areas, may be misleading.

## REFERENCES

1. Office for National Statistics. *Abortion Statistics*, Series AB1. TSO (London).
2. The Alan Guttmacher Institute. *Sharing responsibility: Women, Society and Abortion Worldwide*. (New York: 1999).
3. Waterhouse J, Muir C, Correa, P and Powell J (eds). *Cancer Incidence in Five Continents. IARC Scientific Publications No. 15*, Volume III. International Agency for Research on Cancer (Lyon: 1976).
4. Quinn M, Babb P, Brock A, Kirby L and Jones J. *Cancer Trends in England and Wales 1950–1999*, (Studies on Medical and Population Subjects No 66). TSO (London: 2001).
5. Harris V, Sandridge A L, Black R J, Brewster D H and Gould A. *Cancer Registration Statistics Scotland 1986–1995*. ISD Scotland Publications (Edinburgh: 1998).
6. Office for National Statistics. *Mortality Statistics Cause*, Series DH2. TSO (London: 2000).

**APPENDIX I**

The formulae used to calculate the age-standardised abortion rates are given below.

For the analysis of trends in abortion rates for England and Wales:

$$\text{Rate} = \frac{\sum_{\text{all ages } i} \text{rate}_i \text{EuSP}_i}{\sum_{i=15}^{44} \text{EuSP}_i}$$

where  $\text{EuSP}_i$  is the population of women of age  $i$  in the European Standardised Population

For the area analyses :

$$\text{Rate} = \frac{\sum_{i=15}^{44} \text{rate}_i \text{EuSP}_i}{\sum_{i=15}^{44} \text{EuSP}_i}$$

Where  $\text{rate}_{15} = \frac{\text{number of abortions to women under 16}}{\text{population of 15 year olds}}$

and  $\text{rate}_{44} = \frac{\text{number of abortions to women aged 44 and over}}{\text{population of 44 year olds}}$

Rates for 14-year-olds and women aged over 44 were not used in the calculation of the standardised area rates because there are few abortions to women in these age groups in each Health Authority.

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## Symbols

- .. not available
- : not applicable
- nil or less than half the final digit shown
- blank not yet available

Table I.1

## Population and vital rates: international

Selected countries

Year	United Kingdom (1)	Austria (2)	Belgium (2)	Denmark (2)	Finland (2)	France (2)	Germany (2)*	Greece (2)	Irish Republic (2)	Italy (2)	Luxembourg (2)	Netherlands (2)	Portugal (2)
<b>Population (thousands)</b>													
1971	55,928	7,501	9,673	4,963	4,612	51,251	78,313	8,831	2,992	54,073	342	13,194	8,644
1976	56,216	7,566	9,818	5,073	4,726	52,909	78,337	9,167	3,238	55,718	361	13,774	9,356
1981	56,352	7,569	9,859	5,121	4,800	54,182	78,408	9,729	3,443	56,502	365	14,247	9,851
1986	56,852	7,588	9,862	5,120	4,918	55,547	77,720	9,967	3,543	56,596	368	14,572	10,011
1991	57,808	7,813	10,004	5,154	5,014	57,055	80,014	10,247	3,534	56,751	387	15,070	9,871
1992	58,006	7,914	10,045	5,171	5,042	57,374	80,625	10,322	3,558	56,859	393	15,184	9,867
1993	58,191	7,992	10,084	5,189	5,066	57,654	81,156	10,379	3,576	57,049	398	15,290	9,881
1994	58,395	8,030	10,116	5,206	5,088	57,900	81,438	10,426	3,590	57,204	404	15,383	9,902
1995	58,606	8,047	10,137	5,233	5,108	58,139	81,678	10,454	3,609	57,301	410	15,459	9,916
1996	58,801	8,059	10,157	5,263	5,125	58,375	81,915	10,476	3,636	57,397	416	15,530	9,927
1997	59,009	8,072	10,181	5,285	5,140	58,610	82,034	10,499	3,673	57,512	421	15,611	9,946
1998	59,237	8,078	10,203	5,304	5,153	58,851	82,047	10,516	3,714	57,588	426	15,707	9,968
1999	59,501	8,092	10,226	5,322	5,165	59,099	82,100	10,534	3,756	57,646	432	15,812	9,989
<b>Population changes (per 1,000 per annum)</b>													
1971-76	1.0	1.7	3.0	4.4	4.9	6.5	0.1	7.6	16.4	6.1	10.7	8.8	16.5
1976-81	0.5	0.1	0.8	1.9	3.1	4.8	0.2	12.3	13.3	2.8	2.5	6.9	10.6
1981-86	1.8	0.5	0.1	0.0	4.9	5.0	-1.8	4.9	6.0	0.3	1.8	4.6	3.2
1986-91	3.4	5.9	2.9	1.3	3.9	5.4	5.9	5.6	-0.7	0.5	10.2	6.8	-2.8
1991-92	3.4	12.9	4.1	3.3	5.6	5.6	7.6	7.3	6.8	1.9	13.9	7.6	-0.4
1992-93	3.2	9.8	3.9	3.5	4.8	4.9	6.6	5.5	5.1	3.4	14.3	7.0	1.4
1993-94	3.5	4.8	3.1	3.3	4.3	4.3	3.5	4.6	3.9	2.7	14.3	6.1	2.2
1994-95	3.6	2.1	2.1	5.2	3.9	4.1	2.9	2.7	5.3	1.7	14.6	4.9	1.4
1995-96	3.3	1.6	1.9	5.7	3.3	4.1	2.9	2.1	7.5	1.7	14.4	4.6	1.1
1996-97	3.5	1.6	2.4	4.2	3.0	4.0	1.5	2.1	10.2	2.0	13.0	5.2	1.9
1997-98	3.9	0.7	2.2	3.6	2.5	4.1	0.2	1.7	11.2	1.3	11.9	6.1	2.2
1998-99	4.5	1.7	2.3	3.4	2.3	4.2	0.6	1.7	11.3	1.0	14.1	6.7	2.1
<b>Live birth rate (per 1,000 per annum)</b>													
1971-75	14.1	13.3	13.4	14.6	13.1	16.0	10.5	15.8	22.2	16.0	11.6	14.9	20.3
1976-80	12.5	11.5	12.5	12.0	13.6	14.1	10.5	15.6	21.3	12.6	11.2	12.6	17.9
1981-85	12.9	12.0	12.0	10.2	13.4	14.2	10.7	13.3	19.2	10.6	11.6	12.2	14.5
1986-90	13.6	11.6	12.1	11.5	12.7	13.8	10.6	10.6	15.8	9.8	12.2	12.8	11.9
1991	13.7	12.1	12.6	12.5	13.0	13.3	10.4	10.1	15.0	9.9	12.9	13.2	11.8
1992	13.5	12.1	12.4	13.1	13.3	13.0	10.1	10.1	14.4	9.7	13.1	13.0	11.6
1993	13.1	11.9	12.0	13.0	12.8	12.3	9.9	9.8	13.8	9.6	13.4	12.8	11.5
1994	12.9	11.5	11.5	13.4	12.8	12.3	9.5	10.0	13.4	9.3	13.5	12.7	11.0
1995	12.5	11.0	11.4	13.3	12.3	12.5	9.4	9.7	13.5	9.2	13.2	12.3	10.8
1996	12.5	11.0	11.4	12.9	11.8	12.6	9.7	9.6	13.9	9.2	13.7	12.3	11.1
1997	12.3	10.4	11.4	12.8	11.5	12.4	9.9	9.7	14.2	9.2	13.1	12.3	11.4
1998	12.1	10.1	11.2	12.5	11.1	12.6	9.6	9.6	14.4	9.0	12.6	12.7	11.4
1999	11.8	9.7	11.2	12.4	11.1	12.6	9.4	9.7	14.2	9.1	12.9	12.7	11.6
<b>Death rate (per 1,000 per annum)</b>													
1971-75	11.8	12.6	12.1	10.1	9.5	10.7	12.3	8.6	11.0	9.8	12.2	8.3	11.0
1976-80	11.9	12.3	11.6	10.5	9.3	10.2	12.2	8.8	10.2	9.7	11.5	8.1	10.1
1981-85	11.7	12.0	11.4	11.1	9.3	10.1	12.0	9.0	9.4	9.5	11.2	8.3	9.6
1986-90	11.4	11.1	10.8	11.5	9.8	9.5	9.3	9.1	9.4	10.5	8.5	8.5	9.6
1991	11.3	10.7	10.5	11.6	9.8	9.2	11.4	9.3	8.9	9.7	9.7	8.6	10.5
1992	11.0	10.5	10.3	11.8	9.9	9.1	11.0	9.5	8.7	9.6	10.2	8.6	10.2
1993	11.3	10.3	10.7	12.1	10.1	9.2	11.1	9.4	8.7	9.7	9.8	9.0	10.7
1994	10.7	10.0	10.4	11.7	9.4	9.0	10.9	9.4	8.6	9.7	9.4	8.7	10.0
1995	11.0	10.1	10.5	12.1	9.6	9.1	10.8	9.6	8.9	9.5	9.3	8.8	10.4
1996	10.8	10.0	10.4	11.6	9.6	9.2	10.8	9.6	8.7	9.5	9.4	8.9	10.8
1997	10.7	9.8	10.2	11.3	9.6	9.0	10.5	9.5	8.6	9.6	9.4	8.7	10.5
1998	10.6	9.7	10.3	11.0	9.6	9.2	10.4	9.8	8.4	9.9	9.1	8.8	10.7
1999	10.6	9.7	10.3	11.1	9.6	9.2	10.3	9.8	8.4	9.9	8.8	8.9	10.8
2000	10.3 ‡												

\*Including former GDR throughout.

≠ Estimates prepared by the Population Division of the United Nations - Excludes Hong Kong.

† Rates are based on, births to, or deaths of, Japanese nationals only.

‡ Rates are for 1990-1995.

\*\* Estimates prepared by Eurostat.

‡ Provisional.

Population estimated as follows:

(1) At 30 June.

(2) Estimated Mid year population as given in Council of Europe report: Recent Demographic Developments in Europe.

(3) The European Union consists of 15 member countries (EU15); live birth rates and death rates as given in Eurostat report, Demographic Statistics.

(4) At 1 July as given in the United Nations Demographic Yearbook or United Nations Monthly Bulletin of Statistics.

Note figures may not add due to rounding.

**Table 1.1  
continued****Population and vital rates: international***Selected countries*

Spain (2)	Sweden (2)	European Union (3)	Russian Federation (2)	Australia (4)	Canada (4)	New Zealand (4)	China <sup>≠</sup> (4)	India (4)	Japan <sup>†</sup> (4)	USA (4)	Year
											<b>Population (thousands)</b>
34,216	8,098	342,631	130,934	13,067	22,026	2,899	852,290	551,311	105,145	207,661	1971
36,118	8,222	350,598	135,027	14,033	23,517	3,163	937,170 <sup>≠</sup>	617,248	113,094	218,035	1976
37,741	8,320	356,490	139,225	14,923	24,900	3,195	1,008,460 <sup>≠</sup>	675,185	117,902	229,958	1981
38,536	8,370	359,570	144,154	16,018	26,204	3,317	1,086,733 <sup>≠</sup>	767,199	121,672	240,680	1986
38,920	8,617	366,259	147,885	17,284	28,030	3,480	1,170,100 <sup>≠</sup>	851,900	123,964	252,618	1991
39,008	8,668	368,035	148,312	17,489	28,380	3,510	1,183,600 <sup>≠</sup>	868,900	124,425	255,391	1992
39,086	8,719	369,710	148,146	17,667	28,700	3,550	1,196,400 <sup>≠</sup>	886,250	124,829	258,080	1993
39,149	8,781	371,011	147,968	17,855	29,040	3,600	1,208,800 <sup>≠</sup>	903,940 <sup>≠</sup>	125,178	260,602	1994
39,210	8,827	372,132	147,774	18,072	29,350	3,660	1,220,520 <sup>≠</sup>	921,990 <sup>≠</sup>	125,472	263,040	1995
39,270	8,841	373,188	147,373	18,311	29,670	3,710	1,232,460 <sup>≠</sup>	939,540 <sup>≠</sup>	127,761	265,460	1996
39,323	8,846	374,163	146,938	18,520	29,990	3,760	1,255,700	995,220	126,070	268,010	1997
39,371	8,851	371,014	146,534	18,730	30,250	3,790		970,930	126,410	270,560	1998
39,418	8,856	375,948									1999
											<b>Population changes (per 1,000 per annum)</b>
11.1	3.1	4.7	6.3	14.8	13.5	18.2	19.9	23.9	15.1	10.0	1971-76
9.0	2.1	3.4	6.2	12.7	11.8	2.0	15.2	18.8	8.5	10.9	1976-81
4.2	1.4	1.7	7.1	14.7	10.5	7.6	15.5	27.3	6.4	9.3	1981-86
2.0	5.9	3.7	5.2	15.8	13.9	9.8	15.3	22.1	3.8	9.9	1986-91
2.3	5.9	4.9	2.9	11.9	12.5	8.6	11.5	20.0	3.7	11.0	1991-92
2.0	5.8	4.6	-1.1	10.2	11.3	11.4	10.8	20.0	3.2	10.5	1992-93
1.6	7.1	3.5	-1.2	10.6	11.8	14.1	10.4	20.0	2.8	9.8	1993-94
1.6	5.3	3.0	-1.3	12.2	10.7	16.7	9.7	20.0	2.3	9.4	1994-95
1.5	1.6	2.8	-2.7	13.2	10.9	13.7	9.8	19.0	2.3	9.2	1995-96
1.3	0.6	2.6	-3.0	11.4	10.8	13.5	9.5	16.7	2.5	9.6	1996-97
1.2	0.6	2.3	-2.7	11.3	8.7	8.0	9.2	16.4	2.7	9.5	1997-98
1.2	0.6	2.5									1998-99
											<b>Live birth rate (per 1,000 per annum)</b>
19.2	13.5	14.7		18.8	15.9	20.4	27.2	35.6	18.6	15.3	1971-75
17.1	11.6	13.1		15.7	15.5	16.8	18.6	33.4	14.9	15.2	1976-80
12.8	11.3	12.2		15.6	15.1	15.8	19.2	..	12.6	15.7	1981-85
10.8	13.2	12.0		15.1	14.8	17.1			10.6	16.0	1986-90
10.2	14.3	11.7	12.1	14.9	14.3	17.4		29.5	9.9	16.3	1991
10.2	14.2	11.5	10.7	15.1	14.0	17.2		29.0	9.7	16.0	1992
9.9	13.5	11.2	9.3	14.7	13.4	16.5	18.5 <sup>§</sup>	28.7	9.5	15.6	1993
9.5	12.8	10.9	9.5	14.5	13.2	15.9		28.7	9.9	15.2	1994
9.3	11.7	10.8	9.2	14.2	12.8	15.8		28.3	9.5	14.8	1995
9.2	10.8	10.8	8.9	13.8	12.2	15.4		27.3	9.6	14.7	1996
9.4	10.2	10.8	8.6	13.6	11.9	15.3			9.5	14.6	1997
9.3	10.1	10.7 <sup>**</sup>	8.8	13.3		14.6			9.6	14.6	1998
9.6	10.0					15.0					1999
											<b>Death rate (per 1,000 per annum)</b>
8.5	10.5	10.8		8.2	7.4	8.4	7.3	15.5	6.4	9.1	1971-75
8.0	10.9	10.6		7.6	7.2	8.2	6.6	13.8	6.1	8.7	1976-80
7.7	11.0	10.4		7.3	7.0	8.1	6.7	..	6.1	8.6	1981-85
8.2	11.1	10.2		7.2	7.3	8.2			6.4	8.7	1986-90
8.6	11.0	10.2	11.4	6.9	7.0	7.7		9.8	6.7	8.6	1991
8.5	10.9	10.0	12.2	7.1	6.9	7.9		10.1	6.9	8.5	1992
8.7	11.1	10.2	14.3	6.9	7.1	7.6	7.2 <sup>§</sup>	9.3	7.0	8.8	1993
8.6	10.5	9.9	15.5	7.1	7.1	7.5		9.3	7.0	8.8	1994
8.8	10.6	10.0	14.9	6.9	7.1	7.6		9.0	7.4	8.8	1995
8.9	10.6	10.0	14.1	7.0	7.1	7.6		8.9	7.1	8.7	1996
8.9	10.6	9.8	13.7	7.0	7.2	7.3			7.3	8.6	1997
9.2	10.5	9.9 <sup>**</sup>	13.6	6.8		6.9			7.5	8.6	1998
9.4	10.7					7.4					1999
											2000

See notes opposite.

**Table 1.2****Population: national**  
Numbers (thousands) and percentage age distribution*Constituent countries of the United Kingdom*

Mid-year	United Kingdom	Great Britain	England and Wales	England	Wales	Scotland	Northern Ireland
<b>Estimates</b>							
1971	55,928	54,388	49,152	46,412	2,740	5,236	1,540
1976	56,216	54,693	49,459	46,660	2,799	5,233	1,524
1981	56,357	54,815	49,634	46,821	2,813	5,180	1,543
1986	56,859	55,285	50,162	47,342	2,820	5,123	1,574
1991	57,814	56,207	51,100	48,208	2,891	5,107	1,607
1992	58,013	56,388	51,277	48,378	2,899	5,111	1,625
1993	58,198	56,559	51,439	48,533	2,906	5,120	1,638
1994	58,401	56,753	51,621	48,707	2,913	5,132	1,648
1995	58,612	56,957	51,820	48,903	2,917	5,137	1,655
1996	58,807	57,138	52,010	49,089	2,921	5,128	1,669
1997	59,014	57,334	52,211	49,284	2,927	5,123	1,680
1998	59,237	57,548	52,428	49,495	2,933	5,120	1,689
1999	59,501	57,809	52,690	49,753	2,937	5,119	1,692
<b>of which (percentages)</b>							
0-4	6.1	6.1	6.1	6.1	5.8	5.8	7.1
5-15	14.3	14.2	14.2	14.2	14.5	13.9	17.2
16-44	40.8	40.8	40.7	40.9	38.2	41.5	41.9
45-64M/59F	20.8	20.8	20.8	20.8	21.6	20.8	18.5
65M/60F-74	10.7	10.8	10.7	10.7	11.8	11.3	9.4
75 and over	7.3	7.4	7.4	7.4	8.1	6.7	5.8
<b>Projections<sup>≠</sup></b>							
2001	59,954	58,246	53,137	50,187	2,950	5,109	1,708
2006	60,860	59,119	54,021	51,052	2,969	5,098	1,742
2011	61,773	60,002	54,915	51,922	2,993	5,087	1,771
2016	62,729	60,930	55,853	52,831	3,021	5,078	1,799
2021	63,642	61,820	56,763	53,715	3,047	5,058	1,821
<b>of which (percentages)</b>							
0-4	5.6	5.6	5.6	5.6	5.5	5.3	5.9
5-15	12.2	12.1	12.1	12.1	12.2	11.8	13.3
16-44	35.9	35.9	36.0	36.0	34.8	34.9	37.0
45-64†	27.1	27.2	27.1	27.1	26.3	28.3	26.6
65-74†	10.4	10.5	10.4	10.4	11.4	10.9	9.4
75 and over	8.7	8.8	8.8	8.7	9.7	8.8	7.8

<sup>≠</sup> These projections are based on the mid-1998 population estimates.

<sup>†</sup> Between 2010 and 2020, state retirement age will change from 65 years for men and 60 years for women, to 65 years for both sexes.

Note: Figures may not add exactly due to rounding.

Table 1.3

**Population: subnational**  
 Numbers (thousands) and percentage age distribution

Health Regional Office areas of England\*

Mid-year	Northern and Yorkshire	Trent	Eastern	London	South East	South West	West Midlands	North West
<b>Estimates</b>								
1971	6,723	4,483	4,380	7,750	7,136	4,132	5,146	6,662
1976	6,729	4,557	4,448	7,307	7,378	4,299	5,178	6,588
1981	6,718	4,608	4,781	7,018	7,621	4,300	5,187	6,488
1986	6,692	4,634	4,938	7,013	7,892	4,910	5,197	6,397
1991	6,285	5,035	5,150	6,890	8,266	4,718	5,266	6,600
1992	6,309	5,060	5,175	6,905	8,302	4,746	5,278	6,603
1993	6,323	5,081	5,193	6,933	8,329	4,768	5,290	6,617
1994	6,332	5,096	5,223	6,968	8,379	4,798	5,295	6,616
1995	6,337	5,109	5,257	7,007	8,446	4,827	5,306	6,614
1996	6,338	5,121	5,293	7,074	8,500	4,842	5,317	6,605
1997	6,336	5,128	5,334	7,122	8,569	4,876	5,321	6,598
1998	6,339	5,134	5,377	7,187	8,620	4,901	5,333	6,604
1999	6,336	5,148	5,419	7,285	8,699	4,936	5,336	6,595
<b>of which (percentages)</b>								
0-4	5.9	5.9	6.1	6.9	6.0	5.6	6.2	6.0
5-15	14.4	14.2	14.1	13.6	14.1	13.7	14.7	14.9
16-44	40.1	40.0	40.0	46.8	40.3	38.0	39.8	40.2
45-64M/59F	21.0	21.3	21.4	18.1	21.3	21.7	21.2	20.9
65M/60F-74	11.2	11.2	10.9	8.5	10.6	11.9	11.0	10.8
75 and over	7.3	7.5	7.6	6.1	7.8	9.1	7.2	7.2
<b>Projections<sup>≠</sup></b>								
2001	6,365	5,184	5,448	7,215	8,757	4,977	5,343	6,582
2006	6,382	5,232	5,582	7,337	8,985	5,097	5,358	6,553
2011	6,405	5,277	5,702	7,470	9,191	5,213	5,372	6,530
2016	6,435	5,324	5,823	7,608	9,396	5,333	5,391	6,521
2021	6,464	5,371	5,941	7,736	9,594	5,452	5,411	6,515
<b>of which (percentages)<sup>◇</sup></b>								
0-4	5.5	5.4	5.5	6.4	5.5	4.9	5.7	5.7
5-15	12.2	11.9	12.1	12.5	12.1	11.2	12.5	12.5
16-44	35.5	35.2	34.5	41.5	34.9	32.8	34.9	35.6
45-64†	27.4	27.5	27.2	26.3	27.4	27.8	27.3	27.4
65-74†	10.9	10.9	11.2	7.7	10.9	12.4	10.7	10.5
75 and over	8.5	9.0	9.5	5.6	9.2	10.8	8.9	8.3

\* The Regional Office boundaries were revised from 1 April 1999. See *Health Statistics Quarterly 03 In Brief* for details of the changes. Earlier years' figures have been revised to reflect the new boundaries.

≠ These projections are based on the mid-1996 population estimates and are consistent with the 1996-based national projections produced by the Government Actuary's Department.

† Between 2010 and 2020, state retirement age will change from 65 years for men and 60 years for women, to 65 years for both sexes.

◇ The percentages shown in this table are correct and show the proportion in each age group for 2021. These replace the percentage figures shown in *Health Statistics Quarterly* numbers 01, 02 and 03, and *Population Trends* 95 and 96, which were miscalculated.

Note: Figures may not add exactly because of rounding.

Table 1.4

**Population: subnational**  
Numbers (thousands) and percentage age distribution

Government Office Regions of England

Mid-year	North East	North West*	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West
<b>Estimates</b>									
1971	2,679	7,108	4,902	3,652	5,146	4,454	7,529	6,830	4,112
1976	2,671	7,043	4,924	3,774	5,178	4,672	7,089	7,029	4,280
1981	2,636	6,940	4,918	3,853	5,187	4,854	6,806	7,245	4,381
1986	2,601	6,852	4,906	3,919	5,197	5,012	6,803	7,492	4,560
1991	2,603	6,885	4,983	4,035	5,265	5,150	6,890	7,679	4,718
1992	2,609	6,890	5,002	4,062	5,278	5,175	6,905	7,712	4,746
1993	2,612	6,903	5,014	4,083	5,290	5,193	6,933	7,737	4,768
1994	2,610	6,902	5,025	4,102	5,295	5,223	6,968	7,784	4,798
1995	2,605	6,900	5,029	4,124	5,306	5,257	7,007	7,847	4,827
1996	2,600	6,891	5,036	4,141	5,317	5,293	7,074	7,895	4,842
1997	2,594	6,885	5,037	4,156	5,321	5,334	7,122	7,959	4,876
1998	2,590	6,891	5,043	4,169	5,333	5,377	7,187	8,004	4,901
1999	2,581	6,881	5,047	4,191	5,336	5,419	7,285	8,078	4,936
<b>of which (percentages)</b>									
0-4	5.7	6.0	6.0	5.9	6.2	6.1	6.9	6.0	5.6
5-15	14.4	14.8	14.5	14.2	14.7	14.1	13.6	14.0	13.7
16-44	40.1	40.1	40.4	40.0	39.8	40.0	46.8	40.2	38.0
45-64M/59F	21.1	21.0	20.8	21.5	21.2	21.4	18.1	21.3	21.7
65M/60F-74	11.6	10.9	10.9	11.0	11.0	10.9	8.5	10.6	11.9
75 and over	7.1	7.2	7.4	7.4	7.2	7.6	6.1	7.8	9.1
<b>Projections<sup>‡</sup></b>									
2001	2,579	6,871	5,071	4,234	5,343	5,448	7,215	8,134	4,977
2006	2,555	6,843	5,098	4,312	5,358	5,582	7,337	8,344	5,098
2011	2,536	6,820	5,130	4,384	5,372	5,702	7,470	8,534	5,213
2016	2,521	6,813	5,165	4,455	5,391	5,823	7,609	8,722	5,333
2021	2,509	6,808	5,200	4,523	5,411	5,941	7,736	8,905	5,452
<b>of which (percentages)<sup>◇</sup></b>									
0-4	5.4	5.7	5.6	5.4	5.7	5.5	6.4	5.4	4.9
5-15	12.1	12.4	12.2	12.0	12.5	12.1	12.5	12.1	11.2
16-44	35.1	35.4	35.9	35.1	34.9	34.5	41.5	34.9	32.8
45-64†	27.7	27.5	27.3	27.4	27.3	27.2	26.3	27.4	27.8
65-74†	11.2	10.6	10.6	11.1	10.7	11.2	7.7	10.9	12.4
75 and over	8.4	8.4	8.4	9.0	8.9	9.5	5.6	9.3	10.8

\* The North West GOR was created on 3 August 1998 as a merger of the former North West and Merseyside GORs.

‡ These projections are based on the mid-1996 population estimates and are consistent with the 1996-based national projections produced by the Government Actuary's Department.

† Between 2010 and 2020, state retirement age will change from 65 years for men and 60 years for women, to 65 years for both sexes.

◇ The percentages shown in this table are correct and show the proportion in each age group for 2021. These replace the percentage figures shown in *Health Statistics Quarterly* numbers 01, 02 and 03, and *Population Trends* 95 and 96, which were miscalculated.

Note: Figures may not add exactly because of rounding.

Table 1.5

**Population: age and sex**  
 Numbers (thousands)

Constituent countries of the United Kingdom

Mid-year	All ages	Age group													Under 16	16-64/59	65/60 and over
		Under 1	1-4	5-14	15-24	25-34	35-44	45-59	60-64	65-74	75-84	85-89	90 and over				
<b>United Kingdom</b>																	
<b>Persons</b>																	
1971	55,928	899	3,654	8,916	8,144	6,971	6,512	10,202	3,222	4,764	2,159	358	127	14,257	32,548	9,123	
1976	56,216	677	3,043	9,176	8,126	7,868	6,361	9,836	3,131	5,112	2,348	390	147	13,797	32,757	9,663	
1981	56,357	730	2,726	8,147	9,019	8,010	6,774	9,540	2,935	5,195	2,677	..	..	12,543	33,780	10,035	
1986	56,859	749	2,892	7,161	9,280	8,047	7,719	9,212	3,069	5,020	2,988	..	..	11,676	34,847	10,336	
1991	57,814	794	3,094	7,175	8,247	9,057	7,955	9,500	2,888	5,067	3,139	640	258	11,742	35,469	10,602	
1993	58,198	758	3,129	7,417	7,729	9,293	7,787	10,070	2,839	5,169	3,022	689	295	11,966	35,590	10,641	
1994	58,401	758	3,116	7,484	7,555	9,376	7,836	10,277	2,807	5,223	2,954	704	309	12,075	35,691	10,634	
1995	58,612	734	3,101	7,528	7,448	9,411	7,931	10,445	2,784	5,127	3,055	721	326	12,107	35,849	10,656	
1996	58,807	719	3,044	7,596	7,323	9,423	8,093	10,582	2,772	5,058	3,126	729	341	12,099	36,035	10,673	
1997	59,014	736	2,976	7,667	7,230	9,360	8,294	10,697	2,781	5,005	3,176	734	358	12,107	36,213	10,693	
1998	59,237	715	2,956	7,709	7,190	9,232	8,505	10,820	2,818	4,965	3,205	742	380	12,110	36,397	10,730	
1999	59,501	708	2,916	7,763	7,199	9,064	8,746	10,951	2,861	4,929	3,222	750	393	12,114	36,634	10,753	
<b>Males</b>																	
1971	27,167	461	1,874	4,576	4,137	3,530	3,271	4,970	1,507	1,999	716	97	29	7,318	17,008	2,841	
1976	27,360	348	1,564	4,711	4,145	3,981	3,214	4,820	1,466	2,204	775	101	31	7,083	17,167	3,111	
1981	27,412	374	1,400	4,184	4,596	4,035	3,409	4,711	1,376	2,264	922	..	..	6,439	17,646	3,327	
1986	27,698	384	1,483	3,682	4,743	4,063	3,872	4,572	1,463	2,206	1,064	..	..	5,998	18,264	3,437	
1991	28,248	407	1,588	3,688	4,226	4,591	3,987	4,732	1,390	2,272	1,152	167	47	6,033	18,576	3,639	
1993	28,477	388	1,603	3,808	3,968	4,723	3,903	5,016	1,373	2,333	1,118	187	56	6,140	18,644	3,693	
1994	28,595	389	1,596	3,841	3,880	4,769	3,928	5,118	1,363	2,363	1,097	193	59	6,194	18,689	3,712	
1995	28,731	376	1,588	3,862	3,824	4,796	3,984	5,201	1,358	2,330	1,148	201	63	6,208	18,780	3,742	
1996	28,860	369	1,560	3,897	3,759	4,808	4,073	5,270	1,355	2,310	1,186	206	67	6,206	18,884	3,770	
1997	28,992	377	1,526	3,933	3,709	4,782	4,181	5,326	1,360	2,298	1,216	211	72	6,210	18,984	3,798	
1998	29,128	366	1,516	3,953	3,687	4,721	4,294	5,387	1,380	2,290	1,237	218	79	6,210	19,094	3,824	
1999	29,299	363	1,495	3,980	3,694	4,642	4,425	5,454	1,400	2,284	1,255	223	83	6,211	19,243	3,845	
<b>Females</b>																	
1971	28,761	437	1,779	4,340	4,008	3,441	3,241	5,231	1,715	2,765	1,443	261	97	6,938	15,540	6,282	
1976	28,856	330	1,479	4,465	3,980	3,887	3,147	5,015	1,665	2,908	1,573	289	116	6,714	15,590	6,552	
1981	28,946	356	1,327	3,963	4,423	3,975	3,365	4,829	1,559	2,931	1,756	..	..	6,104	16,134	6,708	
1986	29,160	364	1,408	3,480	4,538	3,985	3,847	4,639	1,606	2,814	1,924	..	..	5,678	16,583	6,899	
1991	29,566	387	1,505	3,487	4,021	4,466	3,968	4,769	1,498	2,795	1,987	472	210	5,709	16,894	6,963	
1993	29,720	370	1,526	3,609	3,761	4,570	3,883	5,053	1,465	2,836	1,904	503	240	5,826	16,946	6,948	
1994	29,805	369	1,520	3,644	3,675	4,608	3,908	5,159	1,444	2,861	1,856	511	250	5,881	17,002	6,923	
1995	29,881	358	1,513	3,665	3,624	4,616	3,947	5,244	1,427	2,797	1,907	519	263	5,898	17,068	6,914	
1996	29,948	350	1,484	3,699	3,565	4,615	4,020	5,312	1,418	2,748	1,941	523	274	5,893	17,152	6,903	
1997	30,022	359	1,450	3,734	3,521	4,579	4,113	5,372	1,421	2,707	1,960	522	286	5,897	17,229	6,896	
1998	30,108	349	1,440	3,756	3,503	4,511	4,211	5,433	1,438	2,674	1,968	525	301	5,900	17,302	6,906	
1999	30,202	345	1,421	3,783	3,505	4,422	4,321	5,497	1,460	2,645	1,967	527	309	5,903	17,391	6,908	
<b>England and Wales</b>																	
<b>Persons</b>																	
1971	49,152	782	3,170	7,705	7,117	6,164	5,736	9,034	2,853	4,228	1,926	323	115	12,334	28,710	8,108	
1976	49,459	585	2,642	7,967	7,077	6,979	5,608	8,707	2,777	4,540	2,093	351	135	11,973	28,894	8,593	
1981	49,634	634	2,372	7,085	7,873	7,086	5,996	8,433	2,607	4,619	2,388	383	157	10,910	29,796	8,928	
1986	50,162	655	2,528	6,243	8,134	7,088	6,863	8,136	2,725	4,470	2,673	465	184	10,190	30,759	9,213	
1991	51,100	702	2,728	6,281	7,237	8,008	7,056	8,407	2,553	4,506	2,810	576	233	10,303	31,351	9,446	
1993	51,439	670	2,764	6,504	6,768	8,219	6,887	8,929	2,507	4,596	2,704	623	268	10,515	31,445	9,480	
1994	51,621	671	2,752	6,568	6,612	8,293	6,925	9,118	2,478	4,644	2,642	636	281	10,618	31,530	9,473	
1995	51,820	649	2,739	6,613	6,521	8,329	7,003	9,272	2,458	4,554	2,734	651	297	10,653	31,676	9,491	
1996	52,010	636	2,688	6,683	6,411	8,342	7,146	9,397	2,447	4,490	2,800	658	311	10,655	31,851	9,505	
1997	52,211	651	2,632	6,751	6,332	8,290	7,325	9,503	2,456	4,440	2,844	661	327	10,672	32,018	9,522	
1998	52,428	633	2,615	6,793	6,303	8,177	7,515	9,613	2,490	4,400	2,871	669	348	10,682	32,192	9,554	
1999	52,690	628	2,581	6,847	6,318	8,034	7,734	9,730	2,529	4,367	2,885	676	360	10,694	32,421	9,574	
<b>Males</b>																	
1971	23,897	402	1,626	3,957	3,615	3,129	2,891	4,414	1,337	1,778	637	86	26	6,334	15,036	2,527	
1976	24,089	300	1,358	4,091	3,610	3,532	2,843	4,280	1,304	1,963	690	91	29	6,148	15,169	2,773	
1981	24,160	324	1,218	3,639	4,011	3,569	3,024	4,178	1,227	2,020	825	94	32	5,601	15,589	2,970	
1986	24,456	336	1,297	3,211	4,156	3,579	3,445	4,053	1,302	1,972	954	115	35	5,236	16,143	3,076	
1991	24,995	360	1,401	3,231	3,710	4,065	3,539	4,199	1,234	2,027	1,035	151	43	5,296	16,442	3,257	
1993	25,198	343	1,416	3,341	3,476	4,184	3,456	4,458	1,218	2,082	1,004	170	51	5,397	16,495	3,306	
1994	25,304	344	1,410	3,371	3,396	4,225	3,475	4,551	1,209	2,109	985	175	53	5,448	16,533	3,323	
1995	25,433	333	1,403	3,394	3,348	4,252	3,523	4,626	1,204	2,078	1,032	183	57	5,465	16,619	3,349	
1996	25,557	327	1,378	3,430	3,291	4,265	3,602	4,689	1,201	2,059	1,066	188	61	5,466	16,716	3,375	
1997	25,684	334	1,350	3,463	3,249	4,243	3,700	4,740	1,206	2,048	1,094	192	66	5,475	16,810	3,399	
1998	25,817	324	1,342	3,484	3,233	4,190	3,803	4,795	1,224	2,040	1,113	197	72	5,479	16,915	3,422	
1999	25,985	322	1,323	3,511	3,244	4,123	3,923	4,854	1,243	2,034	1,129	202	76	5,484	17,060	3,441	
<b>Females</b>																	
1971	25,255	380	1,544	3,749	3,502	3,036	2,845	4,620	1,516	2,450	1,289	236	89	6,000	13,673	5,581	
1976	25,370	285	1,284	3,876	3,467	3,447	2,765	4,428	1,473	2,577	1,403	261	106	5,826	13,725	5,820	
1981	25,474	310	1,154	3,446	3,863	3,517	2,972	4,255	1,380	2,599	1,564	289	126	5,309	14,207	5,958	
1986	25,706	319	1,231	3,032	3,978	3,509	3,418	4,083	1,422	2,498	1,718	349	149	4,953	14,616	6,137	
1991	26,104	342	1,328	3,050	3,527	3,943	3,517	4,208	1,319	2,479	1,775	425	191	5,007	14,908	6,189	
1993	26,241	326	1,348	3,163	3,293	4,035	3,431	4,471	1,289	2,514	1,700	453	218	5,117	14,950	6,173	
1994	26,317	327	1,342	3,197	3,216	4,069	3,449	4,567	1,270	2,536	1,656	461	228	5,170	14,997	6,150	
1995	26,387	316	1,335	3,219	3,172	4,076	3,480	4,646	1,254	2,477	1,702	468	240	5,188	15,058	6,141	
1996	26,453	310	1,310</														

**Table 1.5 continued**

**Population: age and sex**  
Numbers (thousands)

Constituent countries of the United Kingdom

Mid-year	All ages	Age group														
		Under 1	1-4	5-14	15-24	25-34	35-44	45-59	60-64	65-74	75-84	85-89	90 and over	Under 16	16-64/59	65/60 and over
<b>England Persons</b>																
1971	46,412	739	2,996	7,272	6,731	5,840	5,421	8,515	2,690	3,976	1,816	306	109	11,648	27,128	7,636
1976	46,660	551	2,491	7,513	6,688	6,599	5,298	8,199	2,616	4,274	1,972	332	127	11,293	27,275	8,092
1981	46,821	598	2,235	6,678	7,440	6,703	5,663	7,948	2,449	4,347	2,249	362	149	10,285	28,133	8,403
1986	47,342	618	2,385	5,885	7,692	6,717	6,484	7,672	2,559	4,199	2,518	438	174	9,608	29,070	8,665
1991	48,208	663	2,574	5,916	6,840	7,599	6,665	7,920	2,399	4,222	2,645	543	220	9,711	29,627	8,870
1993	48,533	633	2,611	6,125	6,394	7,803	6,508	8,415	2,356	4,308	2,541	587	253	9,913	29,720	8,899
1994	48,707	634	2,601	6,186	6,246	7,873	6,545	8,593	2,329	4,355	2,481	600	265	10,012	29,803	8,893
1995	48,903	615	2,589	6,231	6,158	7,909	6,622	8,738	2,310	4,270	2,568	613	280	10,048	29,946	8,909
1996	49,089	603	2,543	6,298	6,054	7,922	6,761	8,856	2,299	4,210	2,629	620	293	10,053	30,114	8,922
1997	49,284	616	2,490	6,364	5,980	7,873	6,933	8,956	2,308	4,164	2,670	623	308	10,071	30,275	8,939
1998	49,495	599	2,475	6,406	5,954	7,765	7,117	9,060	2,340	4,127	2,694	630	327	10,083	30,443	8,968
1999	49,753	595	2,443	6,459	5,965	7,634	7,329	9,169	2,378	4,098	2,707	637	339	10,097	30,665	8,990
<b>Males</b>																
1971	22,569	380	1,537	3,734	3,421	2,965	2,733	4,161	1,261	1,671	599	107	25	5,982	14,209	2,377
1976	22,728	283	1,280	3,858	3,413	3,339	2,686	4,031	1,228	1,849	649	85	27	5,798	14,320	2,610
1981	22,795	306	1,147	3,430	3,790	3,377	2,856	3,938	1,154	1,902	777	89	30	5,280	14,717	2,798
1986	23,086	317	1,224	3,026	3,931	3,392	3,255	3,822	1,224	1,853	900	109	33	4,937	15,254	2,895
1991	23,588	340	1,322	3,043	3,507	3,859	3,344	3,957	1,159	1,900	975	143	41	4,991	15,539	3,008
1993	23,782	325	1,338	3,146	3,282	3,974	3,267	4,202	1,145	1,951	945	160	48	5,089	15,590	3,103
1994	23,882	326	1,332	3,175	3,207	4,012	3,286	4,289	1,136	1,977	926	166	50	5,137	15,626	3,119
1995	24,008	315	1,327	3,198	3,160	4,039	3,333	4,360	1,132	1,948	969	173	54	5,155	15,709	3,144
1996	24,129	309	1,304	3,233	3,106	4,051	3,410	4,420	1,129	1,931	1,002	177	58	5,158	15,803	3,167
1997	24,251	316	1,278	3,265	3,067	4,030	3,504	4,468	1,134	1,921	1,027	181	62	5,168	15,893	3,191
1998	24,378	307	1,270	3,285	3,052	3,978	3,603	4,519	1,151	1,913	1,045	186	68	5,172	15,994	3,212
1999	24,543	305	1,252	3,312	3,061	3,918	3,720	4,575	1,169	1,908	1,060	191	72	5,178	16,134	3,231
<b>Females</b>																
1971	23,843	359	1,459	3,538	3,310	2,875	2,688	4,354	1,429	2,305	1,217	309	85	5,666	12,918	5,259
1976	23,932	269	1,211	3,656	3,275	3,260	2,612	4,168	1,387	2,425	1,323	246	100	5,495	14,968	5,481
1981	24,026	292	1,088	3,248	3,650	3,327	2,807	4,009	1,295	2,445	1,472	273	119	5,004	13,416	5,605
1986	24,257	301	1,161	2,859	3,761	3,325	3,229	3,850	1,335	2,346	1,618	330	141	4,671	13,816	5,770
1991	24,620	324	1,253	2,873	3,333	3,739	3,322	3,964	1,239	2,323	1,670	400	179	4,720	14,088	5,812
1993	24,751	309	1,273	2,979	3,111	3,829	3,241	4,212	1,211	2,357	1,597	427	205	4,824	14,131	5,796
1994	24,825	309	1,268	3,010	3,039	3,862	3,259	4,304	1,193	2,378	1,555	434	214	4,874	14,177	5,774
1995	24,896	300	1,262	3,033	2,998	3,871	3,289	4,378	1,178	2,322	1,598	441	226	4,893	14,237	5,765
1996	24,960	293	1,239	3,065	2,948	3,872	3,351	4,437	1,170	2,279	1,627	443	235	4,894	14,311	5,755
1997	25,033	300	1,213	3,099	2,913	3,843	3,429	4,488	1,174	2,244	1,643	442	246	4,903	14,382	5,748
1998	25,117	292	1,205	3,120	2,902	3,787	3,514	4,540	1,189	2,214	1,649	444	260	4,911	14,450	5,756
1999	25,210	290	1,191	3,146	2,904	3,716	3,609	4,594	1,209	2,190	1,647	446	267	4,919	14,531	5,760
<b>Wales Persons</b>																
1971	2,740	43	173	433	386	325	315	519	164	252	110	16	6	686	1,582	472
1976	2,799	33	151	453	388	379	309	509	161	267	121	19	7	680	1,618	501
1981	2,813	36	136	407	434	383	333	485	158	272	139	21	8	626	1,663	525
1986	2,820	37	143	358	441	371	378	464	166	271	155	26	10	582	1,690	548
1991	2,891	39	154	365	397	409	391	486	154	284	165	33	13	592	1,724	576
1993	2,906	36	153	379	375	416	379	514	151	288	163	36	15	602	1,725	580
1994	2,913	36	151	382	367	420	379	525	149	289	161	36	16	606	1,727	580
1995	2,917	35	149	383	363	420	380	534	148	284	166	37	17	605	1,730	581
1996	2,921	34	145	385	357	420	385	541	148	280	171	38	18	602	1,737	582
1997	2,927	35	141	387	352	417	392	547	148	276	174	39	19	601	1,743	583
1998	2,933	34	140	388	349	413	398	553	150	273	177	39	20	599	1,749	585
1999	2,937	33	138	388	353	400	405	561	151	269	178	39	21	597	1,756	584
<b>Males</b>																
1971	1,329	22	89	222	194	164	158	253	76	107	38	6	1	352	827	150
1976	1,361	17	78	233	197	193	157	249	75	114	41	5	2	350	849	162
1981	1,365	18	70	209	221	193	168	240	73	118	48	5	2	321	871	173
1986	1,370	19	73	185	225	187	190	231	79	119	54	7	2	300	889	181
1991	1,407	20	79	188	203	206	195	242	74	128	60	8	2	305	904	199
1993	1,417	19	78	195	193	210	189	256	73	131	60	9	3	309	905	203
1994	1,422	19	77	196	190	213	189	262	72	131	60	10	3	311	907	204
1995	1,425	18	76	196	188	214	190	266	72	130	62	10	4	310	910	206
1996	1,428	17	74	197	185	214	192	269	72	128	65	10	4	308	913	207
1997	1,433	18	72	198	182	214	196	272	72	127	67	11	4	308	917	208
1998	1,439	17	72	199	181	212	199	275	73	126	68	11	4	307	922	210
1999	1,442	17	71	199	183	206	203	279	74	125	69	12	4	306	926	210
<b>Females</b>																
1971	1,412	21	85	211	191	161	157	265	88	146	73	16	4	335	755	322
1976	1,438	16	73	220	191	187	153	260	86	152	80	14	6	330	770	339
1981	1,448	18	66	199	213	190	165	246	85	154	91	16	6	305	791	352
1986	1,450	18	70	173	217	184	188	233	87	152	101	20	8	282	800	367
1991	1,484	19	75	177	194	203	195	244	80	156	105	25	11	288	820	377
1993	1,490	18	75	185	181	206	190	258	78	157	103	26	13	293	819	377
1994	1,491	18	74	186	177	207	190	263	77	158	101	27	13	295	820	376
1995	1,491	17	73	187	175	206	190	268	76	154	104	27	14	295	820	376
1996	1,493	16	71	188	172	206	193	272	76	151	106	28	15	294	824	375
1997	1,494	17	69	189	170	204	196	275	76	148	107	28	15	293	826	375
1998	1,495	16	68	189	168	201	198	278	76	147	109	28	16	292	827	375
1999	1,495	16	67	189	170	195	202	282	77	144	109	27	17	291	831	374

**Table 1.5  
continued****Population: age and sex**  
Numbers (thousands)

Constituent countries of the United Kingdom

Mid-year	All ages	Age group														
		Under 1	1-4	5-14	15-24	25-34	35-44	45-59	60-64	65-74	75-84	85-89	90 and over	Under 16	16-64/59	65/60 and over
<b>Scotland</b>																
<b>Persons</b>																
1971	5,236	86	358	912	781	617	612	926	294	430	183	29	9	1,440	2,986	810
1976	5,233	67	291	904	806	692	591	897	282	460	202	31	11	1,352	3,023	858
1981	5,180	69	249	780	875	724	603	880	260	460	232	35	14	1,188	3,110	882
1986	5,123	66	257	657	870	742	665	849	273	435	251	41	15	1,063	3,171	889
1991	5,107	66	259	634	754	809	699	853	265	441	259	50	19	1,023	3,174	910
1993	5,120	64	260	648	705	825	694	888	262	451	249	52	21	1,032	3,176	912
1994	5,132	63	261	651	690	829	703	902	260	456	243	53	21	1,038	3,183	911
1995	5,137	61	261	649	677	827	715	911	258	450	250	55	22	1,036	3,187	914
1996	5,128	59	255	647	663	821	728	919	256	446	255	56	23	1,028	3,185	915
1997	5,123	60	247	649	651	809	744	924	255	443	259	56	24	1,021	3,185	917
1998	5,120	58	243	650	643	793	760	932	257	442	260	57	24	1,014	3,186	920
1999	5,119	57	238	651	641	771	776	942	259	440	262	58	25	1,008	3,190	921
<b>Males</b>																
1971	2,516	44	184	467	394	306	299	440	134	176	60	8	2	738	1,530	247
1976	2,517	34	149	463	408	347	290	429	128	193	65	8	2	693	1,556	269
1981	2,495	35	128	400	445	364	298	424	118	194	77	8	3	610	1,603	282
1986	2,474	34	131	337	445	375	332	410	127	184	86	10	3	545	1,647	283
1991	2,470	34	133	325	385	407	348	415	124	192	91	12	3	524	1,646	299
1993	2,479	33	133	332	360	415	345	434	123	197	88	13	4	528	1,648	302
1994	2,486	32	133	333	353	418	350	441	122	200	86	14	4	531	1,651	304
1995	2,489	31	133	332	346	416	356	446	121	198	90	14	4	530	1,653	307
1996	2,486	30	130	331	339	413	362	450	121	197	92	15	4	526	1,651	309
1997	2,484	31	126	332	333	407	371	453	121	196	95	15	5	522	1,651	311
1998	2,484	30	124	332	329	399	378	457	122	197	96	16	5	519	1,652	314
1999	2,486	29	122	333	327	388	386	462	123	196	98	16	5	516	1,654	315
<b>Females</b>																
1971	2,720	42	174	445	387	311	313	485	160	254	122	20	7	701	1,455	563
1976	2,716	32	142	440	398	345	301	468	154	267	137	23	8	659	1,468	589
1981	2,685	33	121	380	430	359	305	456	142	265	155	27	11	579	1,506	600
1986	2,649	32	126	320	425	368	334	439	146	250	165	32	12	518	1,525	606
1991	2,637	32	126	309	369	402	351	437	141	249	168	37	16	499	1,528	611
1993	2,642	32	127	316	345	409	349	454	139	254	161	39	17	504	1,528	609
1994	2,646	31	128	318	337	412	353	461	138	256	157	40	17	507	1,532	607
1995	2,647	30	128	317	331	411	359	465	136	252	160	40	18	506	1,534	607
1996	2,642	29	125	316	324	408	366	469	135	249	163	41	19	502	1,534	606
1997	2,638	29	121	317	318	403	374	471	135	247	164	41	19	498	1,534	605
1998	2,636	28	118	317	315	394	382	475	135	245	164	41	19	495	1,535	606
1999	2,634	28	116	318	314	383	390	480	136	244	165	41	20	492	1,536	606
<b>Northern Ireland</b>																
<b>Persons</b>																
1971	1,540	31	126	299	247	189	165	243	74	106	51	7	2	483	853	205
1976	1,524	26	111	306	243	198	163	231	73	111	53	8	2	471	840	212
1981	1,543	27	106	282	271	200	175	227	68	116	57	...	...	444	874	224
1986	1,574	28	107	261	277	217	190	227	71	115	64	...	...	423	917	234
1991	1,607	26	106	260	256	240	200	241	70	120	69	14	6	417	945	246
1993	1,638	25	105	265	256	249	205	252	70	122	69	14	6	419	969	250
1994	1,648	24	103	266	253	254	209	256	69	123	69	15	6	419	978	250
1995	1,655	24	102	265	250	255	213	261	69	123	71	15	7	418	985	252
1996	1,669	24	100	266	249	260	218	266	69	123	72	15	7	417	999	253
1997	1,680	25	98	267	247	261	225	270	70	122	73	16	7	415	1,010	255
1998	1,689	24	98	266	244	262	230	275	71	122	74	16	8	414	1,018	257
1999	1,692	23	97	265	241	259	236	279	72	122	75	16	7	411	1,022	258
<b>Males</b>																
1971	755	16	64	152	127	95	81	116	36	45	19	2	1	246	441	67
1976	754	13	58	157	127	102	81	111	34	47	19	3	0	242	442	70
1981	757	14	54	145	140	102	87	109	32	50	21	...	...	228	454	75
1986	768	14	55	134	142	109	95	110	33	50	23	...	...	217	474	77
1991	783	13	54	133	131	119	100	118	32	53	26	4	1	213	487	83
1993	801	13	54	136	132	124	102	123	32	54	26	4	1	215	501	85
1994	805	12	53	136	131	126	104	126	32	54	26	4	1	215	506	85
1995	809	12	52	136	129	127	106	128	32	54	26	4	1	214	509	86
1996	816	12	51	136	128	130	108	131	33	54	27	4	2	213	516	87
1997	823	12	50	137	128	131	111	133	33	54	28	4	2	213	523	87
1998	827	12	50	136	126	132	113	135	34	54	28	4	2	212	527	88
1999	829	12	50	136	124	131	116	137	35	54	28	5	2	211	529	89
<b>Females</b>																
1971	786	15	62	147	119	95	84	126	39	61	32	5	2	237	411	138
1976	769	13	53	149	116	96	81	120	38	64	33	6	2	229	398	143
1981	786	13	52	137	130	98	88	118	37	66	37	...	...	216	420	150
1986	805	13	52	127	135	107	96	118	38	65	41	...	...	206	442	157
1991	824	13	52	127	125	121	100	123	38	67	44	10	4	203	458	163
1993	838	12	51	129	123	125	103	128	38	69	44	11	5	205	468	165
1994	842	12	50	130	122	127	105	131	37	69	43	11	5	205	472	165
1995	846	12	50	129	121	128	107	133	36	69	44	11	5	204	476	166
1996	853	11	49	129	121	130	110	135	36	69	45	11	5	203	483	167
1997	857	12	48	130	119	129	114	137	37	68	45	11	6	202	487	168
1998	861	12	48	130	118	129	117	139	37	68	46	12	6	202	491	168
1999	863	11	47	129	117	128	120	141	38	68	46	12	6	201	493	169

Table 1.6

Population: age, sex and legal marital status  
Numbers (thousands)

England and Wales

Mid-year	Total population	Males					Females				
		Single	Married	Divorced	Widowed	Total	Single	Married	Divorced	Widowed	Total
<b>Aged</b>											
<b>16 and over</b>											
1971	36,818	4,173	12,522	187	682	17,563	3,583	12,566	296	2,810	19,255
1976	37,486	4,369	12,511	376	686	17,941	3,597	12,538	533	2,877	19,545
1981	38,724	5,013	12,238	611	698	18,559	4,114	12,284	828	2,939	20,165
1986	39,887	5,673	11,886	919	695	19,173	4,613	11,994	1,164	2,943	20,714
1991	40,796	6,024	11,745	1,200	731	19,699	4,822	11,838	1,459	2,978	21,097
1993	40,925	6,147	11,580	1,342	732	19,801	4,906	11,661	1,610	2,946	21,124
1994	41,003	6,221	11,492	1,413	730	19,855	4,958	11,583	1,684	2,922	21,147
1995	41,167	6,345	11,415	1,480	729	19,968	5,058	11,488	1,754	2,898	21,199
1996	41,356	6,482	11,339	1,543	728	20,091	5,171	11,406	1,819	2,870	21,265
1997	41,540	6,622	11,256	1,604	726	20,209	5,292	11,319	1,882	2,838	21,331
1998	41,746	6,768	11,185	1,659	725	20,338	5,415	11,244	1,940	2,808	21,408
1999	41,996	6,936	11,128	1,716	721	20,501	5,539	11,185	2,001	2,771	21,495
<b>16-19</b>											
1971	2,666	1,327	34	0	0	1,362	1,163	142	0	0	1,305
1976	2,901	1,454	28	0	0	1,482	1,289	129	0	0	1,419
1981	3,310	1,675	20	0	0	1,694	1,523	93	0	0	1,616
1986	3,144	1,601	10	0	0	1,611	1,483	49	1	0	1,533
1991	2,680	1,372	8	0	0	1,380	1,267	32	0	0	1,300
1993	2,421	1,242	4	0	0	1,246	1,157	18	0	0	1,175
1994	2,360	1,212	3	0	0	1,215	1,131	14	0	0	1,145
1995	2,374	1,220	3	0	0	1,222	1,139	13	0	0	1,152
1996	2,436	1,251	2	0	0	1,253	1,171	12	0	0	1,183
1997	2,517	1,291	2	0	0	1,293	1,212	11	0	0	1,224
1998	2,578	1,322	2	0	0	1,324	1,242	11	0	0	1,254
1999	2,595	1,332	2	0	0	1,334	1,250	11	0	0	1,261
<b>20-24</b>											
1971	3,773	1,211	689	3	0	1,904	745	1,113	9	2	1,869
1976	3,395	1,167	557	4	0	1,728	725	925	16	2	1,667
1981	3,744	1,420	466	10	1	1,896	1,007	811	27	2	1,847
1986	4,203	1,794	322	14	0	2,130	1,382	658	32	1	2,072
1991	3,966	1,764	249	12	0	2,025	1,421	490	29	1	1,941
1993	3,770	1,742	182	8	0	1,933	1,432	381	23	1	1,838
1994	3,625	1,699	152	7	0	1,858	1,416	330	20	1	1,767
1995	3,495	1,658	127	6	0	1,791	1,404	282	17	0	1,703
1996	3,329	1,597	105	5	0	1,707	1,369	238	15	0	1,622
1997	3,177	1,536	87	4	0	1,628	1,333	204	12	0	1,549
1998	3,084	1,500	76	3	0	1,579	1,314	180	10	0	1,505
1999	3,085	1,511	68	3	0	1,582	1,328	165	9	0	1,503
<b>25-29</b>											
1971	3,267	431	1,206	16	1	1,654	215	1,367	29	4	1,614
1976	3,758	533	1,326	39	2	1,900	267	1,522	65	5	1,859
1981	3,372	588	1,057	54	1	1,700	331	1,247	89	4	1,671
1986	3,724	841	956	79	1	1,877	527	1,204	113	4	1,847
1991	4,246	1,183	894	85	1	2,163	800	1,158	123	2	2,083
1993	4,220	1,263	807	80	1	2,152	880	1,062	124	2	2,069
1994	4,168	1,293	754	76	1	2,124	908	1,011	122	2	2,044
1995	4,094	1,326	696	70	1	2,092	936	947	116	2	2,002
1996	4,045	1,368	639	64	1	2,071	977	887	109	2	1,975
1997	3,972	1,401	577	58	1	2,037	1,014	818	101	2	1,935
1998	3,883	1,422	520	51	0	1,994	1,047	750	91	2	1,889
1999	3,774	1,426	469	45	0	1,941	1,062	686	84	2	1,833
<b>30-34</b>											
1971	2,897	206	1,244	23	3	1,475	111	1,269	34	8	1,422
1976	3,220	236	1,338	55	3	1,632	118	1,388	75	8	1,588
1981	3,715	318	1,451	97	3	1,869	165	1,544	129	9	1,846
1986	3,341	356	1,200	125	2	1,683	206	1,292	154	6	1,658
1991	3,762	535	1,206	160	2	1,903	335	1,330	189	5	1,859
1993	3,999	662	1,194	174	2	2,032	418	1,338	205	5	1,967
1994	4,126	732	1,187	179	2	2,100	467	1,340	213	5	2,025
1995	4,235	799	1,177	182	2	2,160	518	1,333	218	5	2,075
1996	4,296	855	1,155	181	2	2,194	560	1,316	221	5	2,103
1997	4,318	903	1,125	177	3	2,207	598	1,287	222	5	2,111
1998	4,294	938	1,085	171	3	2,196	627	1,247	219	5	2,098
1999	4,260	976	1,041	163	2	2,182	652	1,205	216	5	2,078

Note: Population estimates by marital status for 1971 and 1976 are based on the 1971 Census and those for 1981 and 1986 are based on the 1981 Census and have not been rebased using the 1991 Census.

**Table 1.6  
continued****Population: age, sex and legal marital status**  
Numbers (thousands)

England and Wales

Mid-year	Total population	Males					Females				
		Single	Married	Divorced	Widowed	Total	Single	Married	Divorced	Widowed	Total
<b>35-44</b>											
1971	5,736	317	2,513	48	13	2,891	201	2,529	66	48	2,845
1976	5,608	286	2,442	104	12	2,843	167	2,427	129	42	2,765
1981	5,996	316	2,519	178	12	3,024	170	2,540	222	41	2,972
1986	6,863	397	2,743	293	12	3,444	213	2,816	350	39	3,419
1991	7,056	482	2,658	388	12	3,539	280	2,760	444	34	3,517
1993	6,887	522	2,500	423	12	3,456	316	2,612	473	31	3,431
1994	6,925	556	2,463	444	12	3,475	343	2,587	491	29	3,449
1995	7,003	601	2,446	464	12	3,523	374	2,568	509	29	3,480
1996	7,146	657	2,449	483	13	3,602	414	2,575	527	28	3,544
1997	7,325	725	2,458	503	13	3,700	459	2,593	545	28	3,625
1998	7,515	802	2,467	520	14	3,803	510	2,612	563	27	3,712
1999	7,734	890	2,483	537	14	3,923	570	2,634	579	27	3,811
<b>45-64</b>											
1971	11,887	502	4,995	81	173	5,751	569	4,709	125	733	6,136
1976	11,484	496	4,787	141	160	5,583	462	4,568	188	683	5,901
1981	11,040	480	4,560	218	147	5,405	386	4,358	271	620	5,635
1986	10,860	461	4,423	332	141	5,356	326	4,221	388	569	5,504
1991	10,960	456	4,394	456	127	5,433	292	4,211	521	503	5,527
1993	11,436	479	4,532	544	122	5,677	297	4,376	615	471	5,759
1994	11,596	489	4,564	587	120	5,759	300	4,422	659	456	5,837
1995	11,730	500	4,581	630	119	5,830	305	4,452	703	440	5,900
1996	11,844	512	4,587	673	118	5,890	310	4,473	746	425	5,954
1997	11,959	524	4,590	715	117	5,946	318	4,494	789	412	6,013
1998	12,103	541	4,604	758	117	6,019	328	4,523	832	401	6,085
1999	12,259	560	4,618	802	117	6,097	340	4,554	875	392	6,162
<b>65 and over</b>											
1971	6,592	179	1,840	17	492	2,527	580	1,437	32	2,016	4,065
1976	7,119	197	2,033	33	510	2,773	569	1,579	60	2,138	4,347
1981	7,548	216	2,167	54	534	2,971	533	1,692	90	2,263	4,578
1986	7,752	223	2,233	76	539	3,070	475	1,754	127	2,325	4,681
1991	8,127	231	2,337	99	589	3,257	427	1,858	153	2,433	4,870
1993	8,191	237	2,360	113	596	3,306	405	1,873	170	2,436	4,885
1994	8,203	239	2,368	121	595	3,323	393	1,879	179	2,429	4,880
1995	8,237	241	2,385	128	595	3,349	382	1,893	190	2,422	4,887
1996	8,259	242	2,401	137	594	3,375	370	1,904	201	2,410	4,884
1997	8,272	242	2,417	147	593	3,399	358	1,912	213	2,390	4,873
1998	8,288	242	2,432	156	592	3,422	347	1,921	225	2,372	4,866
1999	8,288	241	2,446	166	587	3,441	336	1,930	237	2,344	4,847

See note opposite.

**Table 2.1** Vital statistics summary  
Numbers (thousands) and rates

Year and quarter	All live births		Live births outside marriage		Marriages		Divorces		Deaths		Infant mortality***		Neonatal mortality†††		Perinatal mortality	
	Number	Rate*	Number	Rate†	Number	Rate**	Number	Rate††	Number	Rate*	Number	Rate†	Number	Rate†	Number	Rate††††
<b>United Kingdom</b>																
1971	901.6	16.1	73.9	82	459.4	..	79.6	..	645.1	11.5	16.2	17.9	10.8	12.0	20.7	22.6
1976	675.5	12.0	61.1	90	406.0	..	135.4	..	680.8	12.1	9.79	14.5	6.68	9.9	12.3	18.0
1981	730.8	13.0	91.3	125	397.8	49.4	156.4	11.3	658.0	11.7	8.16	11.2	4.93	6.7	8.79	12.0
1986	755.0	13.3	158.5	210	393.9	43.5	168.2	12.5	660.7	11.6	7.18	9.5	4.00	5.3	7.31	9.6
1991	792.5	13.7	236.1	298	349.7	36.0	173.5	13.0	646.2	11.3	5.82	7.4	3.46	4.4	6.45	8.1
1994	750.7	12.9	240.1	320	331.2	..	173.6	..	627.6	10.7	4.63	6.2	3.09	4.1	6.74	9.0
1995	732.0	12.5	245.7	336	322.3	..	170.0	..	645.5	11.0	4.52	6.2	3.05	4.2	6.52	8.9
1996	733.4	12.5	260.4	355	317.5	..	171.7	..	636.0	10.8	4.50	6.1	3.00	4.1	6.41	8.7
1997	726.8	12.3	267.0	367	310.2	..	161.1	..	629.7	10.7	4.25	5.9	2.81	3.9	6.06	8.3
1998	717.1	12.1	269.7	376	304.8	..	160.1	..	629.2	10.6	4.08	5.7	2.72	3.8	5.96	8.3
1999	700.2	11.8	271.6	387	301.1‡	..	158.7‡	..	632.1	10.6	4.05	5.8	2.73	3.9	5.79	8.2
2000									610.6‡	10.3‡	3.82‡	5.6‡	2.63‡	3.9‡	5.55‡	8.1‡
1999 March	171.9	11.7	66.5	387‡	36.9‡	..	40.0‡	..	181.6	12.4	1.07	6.2	0.68	3.9	1.50	8.7
June	177.0	11.9	67.2	379‡	83.4‡	..	39.3‡	..	143.0	9.6	1.02	5.8	0.70	3.9	1.48	8.3
Sept	180.3	12.0	70.5	391‡	124.6‡	..	40.1‡	..	139.1	9.3	0.98	5.4	0.71	3.9	1.44	7.9
Dec	170.9	11.4	67.4	393‡	56.2‡	..	39.3‡	..	168.4	11.2	0.98	5.7	0.65	3.8	1.37	8.0
2000 March	168.2‡	11.3‡	66.7‡	397‡	35.2‡	..	39.9‡	..	183.2‡	12.5‡	1.00‡	5.9‡	0.68‡	4.1‡	1.43‡	8.4‡
June	169.1‡	11.4‡	65.0‡	384‡					142.8‡	9.6‡	0.93‡	5.5‡	0.64‡	3.8‡	1.35‡	7.9‡
Sept	173.7‡	11.6‡	69.1‡	398‡					134.7‡	9.0‡	0.96‡	5.5‡	0.70‡	4.0‡	1.42‡	8.1‡
Dec									149.9‡	10.0‡	0.93‡	5.5‡	0.62‡	3.7‡	1.35‡	8.0‡
<b>England and Wales</b>																
1971	783.2	15.9	65.7	84	404.7	69.0	74.4	5.9	567.3	11.5	13.7	17.5	9.11	11.6	17.6	22.3
1976	584.3	11.8	53.8	92	358.6	57.7	126.7	10.1	598.5	12.1	8.34	14.3	5.66	9.7	10.5	17.7
1981	634.5	12.8	81.0	128	352.0	49.6	145.7	11.9	577.9	11.6	7.02	11.1	4.23	6.7	7.56	11.8
1986	661.0	13.2	141.3	214	347.9	43.5	153.9	12.9	581.2	11.6	6.31	9.6	3.49	5.3	6.37	9.6
1991	699.2	13.7	211.3	302	306.8	35.6	158.7	13.5	570.0	11.2	5.16	7.4	3.05	4.4	5.65	8.0
1994	664.7	12.9	215.5	324	291.1	32.6	158.2	13.7	553.2	10.7	4.10	6.2	2.74	4.1	5.95	8.9
1995	648.1	12.5	219.9	339	283.0	31.0	155.5	13.6	569.7	11.0	3.98	6.1	2.70	4.2	5.70	8.8
1996	649.5	12.5	232.7	358	279.0	30.0	157.1	13.8	560.1	10.8	3.99	6.1	2.68	4.1	5.62	8.6
1997	643.1	12.3	238.2	370	272.5	28.7	146.7	13.0	555.3	10.6	3.80	5.9	2.52	3.9	5.38	8.3
1998	635.9	12.1	240.6	378	267.3	27.7	145.2	12.9	555.0	10.6	3.63	5.7	2.42	3.8	5.26	8.2
1999	621.9	11.8	241.9	389	263.5‡	26.8‡	144.6	12.9‡	556.1	10.6	3.62	5.8	2.44	3.9	5.14	8.2
2000									537.9‡	10.2‡	3.40‡	5.6‡	2.34‡	3.9‡	4.96‡	8.2‡
1999 March	152.1	11.7	59.0	388	32.5‡	13.4‡	36.4‡	13.2‡	159.1	12.2	0.98	6.4	0.62	4.1	1.34	8.7
June	157.3	12.0	59.8	380	73.2‡	29.8‡	35.7‡	12.8‡	125.6	9.6	0.89	5.6	0.60	3.8	1.29	8.2
Sept	160.1	12.1	63.0	393	109.5‡	44.1‡	36.7‡	13.0‡	122.4	9.2	0.89	5.6	0.65	4.0	1.30	8.1
Dec	152.4	11.5	60.2	395	48.4‡	19.5‡	35.8‡	12.7‡	149.0	11.2	0.87	5.7	0.57	3.8	1.21	7.9
2000 March	148.7‡	11.3‡	59.0‡	396‡	31.4‡	12.8‡	36.4‡	13.2‡	161.4‡	12.4‡	0.89‡	6.0‡	0.60‡	4.0‡	1.28‡	8.5‡
June	150.7‡	11.4‡	57.9‡	384‡	71.6‡	29.3‡	35.8‡	12.9‡	125.5‡	9.6‡	0.83‡	5.5‡	0.56‡	3.7‡	1.20‡	7.9‡
Sept	154.9‡	11.6‡	61.7‡	398‡			34.4‡	12.2‡	118.6‡	8.9‡	0.85‡	5.5‡	0.62‡	4.0‡	1.26‡	8.1‡
Dec									132.4‡	10.0‡	0.83‡	5.5‡	0.55‡	3.7‡	1.22‡	8.1‡
<b>England</b>																
1971	740.1	15.9	62.6	85	382.3	..	..	..	532.4	11.5	12.9	17.5	8.58	11.6	16.6	22.1
1976	550.4	11.8	50.8	92	339.0	..	..	..	560.3	12.0	7.83	14.2	5.32	9.7	9.81	17.6
1981	598.2	12.8	76.9	129	332.2	..	..	..	541.0	11.6	6.50	10.9	3.93	6.6	7.04	11.7
1986	623.6	13.2	133.5	214	328.4	..	146.0	..	544.5	11.5	5.92	9.5	3.27	5.2	5.98	9.5
1991	660.8	13.7	198.9	301	290.1	..	150.1	..	534.0	11.2	4.86	7.3	2.87	4.3	5.33	8.0
1994	629.0	13.0	202.7	322	275.5	..	149.6	..	517.6	10.6	3.83	6.1	2.57	4.1	5.58	8.8
1995	613.2	12.5	206.8	337	268.3	..	147.5	..	532.6	10.9	3.74	6.1	2.55	4.2	5.41	8.8
1996	614.2	12.5	218.2	355	264.2	..	148.7	..	524.0	10.7	3.74	6.1	2.53	4.1	5.36	8.7
1997	608.2	12.3	223.4	367	258.0	..	138.7	..	519.1	10.5	3.60	5.9	2.37	3.9	5.09	8.3
1998	602.1	12.2	225.7	375	253.1	..	137.4	..	519.6	10.5	3.39	5.6	2.29	3.8	4.97	8.2
1999	589.5	11.8	226.7	385	249.5‡	..	..	..	519.6	10.4	3.38	5.7	2.29	3.9	4.86	8.2
2000									503.0‡	10.1‡	3.20‡	5.6‡	2.21‡	3.9‡	4.70‡	8.2‡
1999 March	144.1	11.7	55.4	384	30.8‡	..	34.5‡	..	148.6	12.1	0.91	6.3	0.58	4.0	1.26	8.7
June	149.0	12.0	56.1	377	69.3‡	..	33.9‡	..	117.2	9.5	0.83	5.6	0.57	3.8	1.23	8.2
Sept	151.7	12.1	59.0	389	103.5‡	..	34.8‡	..	114.3	9.1	0.83	5.5	0.61	4.0	1.23	8.0
Dec	144.7	11.5	56.2	390	45.9‡	..	34.0‡	..	139.5	11.1	0.81	5.6	0.53	3.7	1.13	7.8
2000 March	140.8‡	11.3‡	55.3‡	393‡	29.8‡	..	34.5‡	..	151.1‡	12.3‡	0.83‡	5.9‡	0.57‡	4.0‡	1.21‡	8.5‡
June	142.9‡	11.5‡	54.5‡	381‡	67.8‡	..	34.0‡	..	117.3‡	9.5‡	0.79‡	5.5‡	0.54‡	3.8‡	1.14‡	8.0‡
Sept	146.8‡	11.7‡	57.8‡	394‡			32.7‡	..	110.8‡	8.8‡	0.80‡	5.4‡	0.58‡	4.0‡	1.19‡	8.1‡
Dec									123.9‡	9.9‡	0.79‡	5.5‡	0.52‡	3.7‡	1.16‡	8.1‡

\* Per 1,000 population of all ages.  
† Per 1,000 live births.  
\*\* Persons marrying per 1,000 unmarried population 16 and over.  
†† Persons divorcing per 1,000 married population.  
\*\*\* Deaths under 1 year.  
††† Deaths under 4 weeks.  
\*\*\*\* Stillbirths and deaths under 1 week. In October 1992 the legal definition of a stillbirth was changed, from baby born dead after 28 completed weeks of gestation or more, to one born dead after 24 completed weeks of gestation or more.  
†††† Per 1,000 live births and stillbirths.  
‡ Provisional.

**Table 2.1 continued**

**Vital statistics summary**  
Numbers (thousands) and rates

Constituent countries of the United Kingdom

Year and quarter	All live births		Live births outside marriage		Marriages		Divorces		Deaths		Infant mortality***		Neonatal mortality†††		Perinatal mortality	
	Number	Rate*	Number	Rate†	Number	Rate**	Number	Rate††	Number	Rate*	Number	Rate†	Number	Rate†	Number	Rate††††
<b>Wales</b>																
1971	43.1	15.7	3.1	71	22.4	..	..	..	34.8	12.7	0.79	18.4	0.53	12.3	1.07	24.4
1976	33.4	11.9	2.9	86	19.5	..	..	..	36.3	13.0	0.46	13.7	0.32	9.6	0.64	19.0
1981	35.8	12.7	4.0	112	19.8	..	..	..	35.0	12.4	0.45	12.6	0.29	8.1	0.51	14.1
1986	37.0	13.1	7.0	211	19.5	..	..	..	34.7	12.3	0.35	9.5	0.21	5.6	0.38	10.3
1991	38.1	13.2	12.3	323	16.6	..	..	8.6	34.1	11.8	0.25	6.6	0.16	4.1	0.30	7.9
1994	35.4	12.2	12.7	360	15.5	..	8.6	..	33.9	11.6	0.22	6.1	0.14	4.1	0.33	9.3
1995	34.5	11.8	13.1	381	14.7	..	8.0	..	35.6	12.2	0.20	5.9	0.13	3.9	0.27	7.9
1996	34.9	11.9	14.4	412	14.8	..	8.4	..	34.6	11.8	0.20	5.6	0.13	3.6	0.26	7.5
1997	34.5	11.8	14.8	428	14.6	..	8.0	..	34.6	11.8	0.20	5.9	0.13	3.9	0.27	7.9
1998	33.4	11.4	14.8	444	14.2	..	7.8	..	34.0	11.6	0.19	5.6	0.12	3.6	0.27	8.0
1999	32.1	10.9	14.8	461	14.0	..	..	..	35.0	11.9	0.20	6.1	0.13	4.0	0.25	7.7
2000									33.5‡	11.4‡	0.16‡	5.2‡	0.11‡	3.6‡	0.23‡	7.3‡
1999 March	7.9	10.9	3.6	454	1.6‡	..	1.9‡	..	10.2	14.1	0.05	6.6	0.03	3.9	0.06	7.9
June	8.2	11.2	3.6	445	3.9‡	..	1.8‡	..	8.0	11.0	0.05	5.6	0.03	3.8	0.05	6.0
Sept	8.3	11.2	3.9	470	6.0‡	..	1.9‡	..	7.7	10.4	0.05	5.9	0.03	3.8	0.07	8.1
Dec	7.7	10.4	3.7	475	2.5‡	..	1.9‡	..	9.2	12.4	0.05	6.3	0.04	4.7	0.07	9.1
2000 March	7.8‡	10.7‡	3.7‡	470‡	1.6‡	..	1.9‡	..	10.0‡	13.8‡	0.04‡	5.6‡	0.03‡	3.8‡	0.06‡	8.0‡
June	7.7‡	10.5‡	3.5‡	451‡	3.5‡	..	1.8‡	..	7.9‡	10.8‡	0.03‡	4.4‡	0.02‡	2.9‡	0.05‡	6.7‡
Sept	8.1‡	10.9‡	3.9‡	478‡			1.7‡	..	7.4‡	10.0‡	0.05‡	5.9‡	0.04‡	4.4‡	0.06‡	7.6‡
Dec									8.2‡	11.1‡	0.04‡	4.8‡	0.02‡	3.1‡	0.05‡	6.8‡
<b>Scotland</b>																
1971	86.7	16.6	7.0	81	42.5	64.1	4.8	3.9	61.6	11.8	1.72	19.9	1.17	13.5	2.15	24.5
1976	64.9	12.5	6.0	93	37.5	53.8	8.1	6.5	65.3	12.5	0.96	14.8	0.67	10.3	1.20	18.3
1981	69.1	13.4	8.5	122	36.2	47.5	9.9	8.0	63.8	12.3	0.78	11.3	0.47	6.9	0.81	11.6
1986	65.8	12.9	13.6	206	35.8	42.8	12.8	10.7	63.5	12.4	0.58	8.8	0.34	5.2	0.67	10.2
1991	67.0	13.1	19.5	291	33.8	38.7	12.4	10.6	61.0	12.0	0.47	7.1	0.29	4.6	0.58	8.6
1994	61.7	12.0	19.2	312	31.5	35.1	13.1	11.4	59.3	11.6	0.38	6.2	0.25	4.0	0.56	9.0
1995	60.1	11.7	20.3	337	30.7	33.7	12.2	10.7	60.5	11.8	0.38	6.2	0.24	4.0	0.58	9.6
1996	59.3	11.6	21.4	360	30.2	32.8	12.3	10.9	60.7	11.8	0.37	6.2	0.23	3.9	0.55	9.2
1997	59.4	11.6	22.4	377	29.6	31.7	12.2	11.0	59.5	11.6	0.32	5.3	0.19	3.2	0.47	7.8
1998	57.3	11.2	22.3	389	29.7	31.2	12.4	11.2	59.2	11.6	0.32	5.6	0.21	3.6	0.50	8.7
1999	55.1	10.8	22.7	412	29.9	31.1	11.9	10.7	60.3	11.8	0.28	5.0	0.18	3.3	0.42	7.6
2000	53.1‡	10.4‡	23.4‡	442‡	30.3‡	31.5‡	10.9‡	10.0‡	57.8‡	11.3‡	0.31‡	5.7‡	0.21‡	4.0‡	0.44‡	8.3‡
1999 March	13.9	11.0	5.7	411	3.6	15.1	3.0	10.9	17.7	14.0	0.06	4.4	0.04	2.5	0.11	7.5
June	13.9	10.9	5.6	402	8.1	33.9	3.1	11.3	13.7	10.7	0.09	6.5	0.06	4.2	0.12	8.4
Sept	14.1	10.9	5.7	406	11.9	49.0	2.9	10.6	13.3	10.3	0.05	3.5	0.04	2.5	0.09	6.3
Dec	13.3	10.3	5.7	430	6.3	25.9	2.9	10.7	15.6	12.1	0.08	5.7	0.05	4.0	0.11	8.2
2000 March	13.7‡	10.8‡	5.9‡	433‡	3.6‡	15.0‡	2.9‡	10.6‡	17.2‡	13.6‡	0.09‡	6.3‡	0.06‡	4.2‡	0.11‡	7.8‡
June	13.2‡	10.4‡	5.5‡	418‡	8.4‡	34.9‡	3.0‡	10.9‡	13.7‡	10.7‡	0.07‡	5.5‡	0.05‡	3.8‡	0.11‡	8.4‡
Sept	13.4‡	10.4‡	5.7‡	427‡	12.4‡	51.0‡	2.7‡	9.6‡	12.9‡	10.0‡	0.08‡	5.7‡	0.06‡	4.1‡	0.12‡	8.7‡
Dec	12.8‡	10.0‡	5.5‡	427‡	6.0‡	24.6‡	2.4‡	8.9‡	14.0‡	10.9‡	0.07‡	5.4‡	0.05‡	3.8‡	0.11‡	8.2‡
<b>Northern Ireland</b>																
1971	31.8	20.7	1.2	38	12.2	..	0.3	..	17.6	12.8	0.72	22.7	0.51	15.9	0.88	27.2
1976	26.4	17.3	1.3	50	9.9	..	0.6	..	17.0	11.2	0.48	18.3	0.35	13.3	0.59	22.3
1981	27.2	17.0	1.9	69	9.6	45.4	1.4	4.2	16.3	10.6	0.36	13.2	0.23	8.3	0.42	15.3
1986	28.0	17.8	3.6	127	10.2	..	1.5	..	16.1	10.3	0.36	13.2	0.23	8.3	0.42	15.3
1991	26.0	16.2	5.3	203	9.2	37.7	2.3	6.8	15.1	9.4	0.19	7.4	0.12	4.6	0.22	8.4
1994	24.1	14.6	5.3	221	8.7	..	2.3	..	15.1	9.2	0.15	6.1	0.10	4.2	0.24	9.7
1995	23.7	14.3	5.5	231	8.6	..	2.3	..	15.3	9.3	0.17	7.1	0.13	5.5	0.25	10.4
1996	24.4	14.6	6.3	260	8.3	..	2.3	..	15.2	9.1	0.14	5.8	0.09	3.7	0.23	9.4
1997	24.1	14.3	6.4	266	8.1	..	2.2	..	15.0	9.0	0.14	5.6	0.10	4.2	0.21	8.6
1998	23.7	14.0	6.7	284	7.8	..	2.5	..	15.0	8.9	0.13	5.6	0.09	3.9	0.20	8.1
1999	23.0	13.6	7.0	303	7.6	..	2.3	..	15.7	9.3	0.15	6.4	0.11	4.8	0.23	10.0
2000									14.9‡	8.8‡	0.11‡	5.0‡	0.08‡	3.8‡	0.15‡	7.1‡
1999 March	5.9	14.0	1.8	303	0.9	..	0.7	..	4.7	11.3	0.03	5.7	0.02	4.0	0.06	10.2
June	5.9	13.9	1.7	298	2.2	..	0.6	..	3.7	8.7	0.04	7.5	0.03	5.8	0.07	11.4
Sept	6.0	14.3	1.8	305	3.2	..	0.5	..	3.5	8.1	0.04	5.9	0.03	4.4	0.05	8.2
Dec	5.1	12.2	1.6	305	1.5	..	0.5	..	3.8	8.9	0.03	6.5	0.03	5.2	0.05	10.1
2000 March	5.8‡	13.9‡	1.8‡	318‡	0.8‡	..	0.6‡	..	4.7‡	11.3‡	0.03‡	4.5‡	0.02‡	3.8‡	0.04‡	7.4‡
June	5.3‡	12.6‡	1.6‡	308‡	2.2‡	..	0.7‡	..	3.6‡	8.5‡	0.03‡	5.2‡	0.02‡	4.1‡	0.04‡	7.2‡
Sept	5.5‡	12.8‡	1.8‡	326‡			0.5‡	..	3.2‡	7.5‡	0.03‡	5.3‡	0.02‡	3.8‡	0.04‡	7.0‡
Dec	5.0‡	11.6‡	1.6‡	316‡					3.5‡	8.1‡	0.03‡	5.2‡	0.02‡	3.4‡	0.03‡	6.5‡

Notes: 1. Rates for the most recent quarters will be particularly subject to revision, even when standard detail is given, as they are based on provisional numbers or on estimates derived from events registered in the period.  
 2. Figures for England and Wales represent the numbers of deaths registered in each year up to 1992, and the number of deaths occurring in each year from 1993. Provisional figures are registrations.  
 3. From 1972 figures for England and figures for Wales each exclude events for persons usually resident outside England and Wales. These events are however

included in the totals for England and Wales combined, and for the United Kingdom.  
 4. From 1981 births to non-resident mothers in Northern Ireland are excluded from the figures for Northern Ireland, but included in the figures for the United Kingdom.  
 5. Figures may not add exactly due to rounding.

**Table 2.2**

**Key demographic and health indicators**  
Numbers (thousands), rates, percentages, mean age

Constituent countries of the United Kingdom

	Population	Live births	Deaths	Dependency ratio		Live births			Age-standardised mortality rate††	Expectation of life (in years) at birth		Infant mortality rate***
				Children*	Elderly†	TFR**	Outside marriage as percentage of total live births	Mean age of mother at birth (years)		Males	Females	
<b>United Kingdom</b>												
1971	55,928.0	901.6	645.1	43.8	28.0	2.41	8.2	26.2	10,448	68.8	75.0	17.9
1976	56,216.1	675.5	680.8	42.1	29.5	1.74	9.0	26.4	10,486	69.6	75.2	14.5
1981	56,357.5	730.8	658.0	37.1	29.7	1.82	12.5	26.8	9,506	70.8	76.8	11.2
1986	56,858.5	755.0	660.7	33.5	29.6	1.78	21.0	27.0	8,897	71.9	77.7	9.5
1991	57,813.8	792.5	646.2	33.1	29.9	1.82	29.8	27.6	8,107	73.2	78.8	7.4
1994	58,400.8	750.7	627.6	33.3	29.9	1.74	32.0	28.4	7,622	73.9	79.2	6.2
1995	58,611.7	732.0	645.5	33.6	29.9	1.71	33.6	28.5	7,706	74.1	79.4	6.2
1996	58,807.2	733.4	636.0	33.8	29.8	1.72	35.5	28.6	7,522	74.3	79.5	6.1
1997	59,014.0	726.8	629.7	33.8	29.7	1.72	36.7	28.8	7,370	74.6	79.6	5.9
1998	59,237.0	717.1	629.2	33.6	29.6	1.71	37.6	28.9	7,290	74.8‡	79.8‡	5.7
1999	59,500.9	700.2	632.1	33.4	29.5	1.69	38.7	29.0	7,255			5.8
2000			610.6‡						7,008‡			5.6‡
<b>England</b>												
1971	46,411.7	740.1	532.4	42.9	28.1	2.37	8.5		10,278		17.5	
1976	46,659.9	550.4	560.3	41.4	29.7	1.70	9.2	26.4	10,271		14.2	
1981	46,820.8	598.2	541.0	36.4	29.9	1.79	12.9	26.8	9,298	71.1	77.0	10.9
1986	47,342.4	623.6	544.5	33.1	29.8	1.87	21.4	27.0	8,694	72.2	77.9	9.5
1991	48,208.1	660.8	534.0	32.8	29.9	1.81	30.1	27.7	7,941	73.4	79.0	7.3
1994	48,707.5	629.0	517.6	33.1	30.0	1.74	32.2	28.4	7,440	74.1	79.4	6.1
1995	48,903.4	613.2	532.6	33.4	29.9	1.71	33.7	28.6	7,526	74.4	79.6	6.1
1996	49,089.1	614.2	524.0	33.6	29.8	1.73	35.5	28.7	7,333	74.6	79.7	6.1
1997	49,284.2	608.2	519.1	33.6	29.8	1.72	36.7	28.8	7,190	74.9	79.9	5.9
1998	49,494.6	602.1	519.6	33.4	29.6	1.72	37.5	29.0	7,128	75.1‡	80.0‡	5.6
1999	49,752.9	589.5	519.6	33.3	29.5	1.69	38.5	29.0	7,062			5.7
2000			503.0‡						6,837‡			5.6‡
<b>Wales</b>												
1971	2,740.3	43.1	34.8	43.4	29.8	2.44	7.2		11,175			18.4
1976	2,799.3	33.4	36.3	42.0	30.9	1.79	8.7	26.0	10,858			13.7
1981	2,813.5	35.8	35.0	37.6	31.6	1.87	11.2	26.6	9,846	70.4	76.4	12.6
1986	2,819.6	37.0	34.7	34.4	32.5	1.86	21.1	26.5	9,012	71.6	77.6	9.5
1991	2,891.5	38.1	34.1	34.4	33.4	1.88	32.3	27.0	8,074	73.2	78.9	6.6
1994	2,913.0	35.4	33.9	34.6	33.6	1.79	36.0	27.7	7,753	73.5	79.0	6.1
1995	2,916.8	34.5	35.6	34.9	33.6	1.78	38.1	27.8	7,953	73.8	79.2	5.8
1996	2,921.1	34.9	34.6	35.1	33.6	1.82	41.2	27.8	7,664	74.0	79.2	5.6
1997	2,926.9	34.5	34.6	35.0	33.6	1.82	42.8	28.0	7,578	74.4	79.4	5.9
1998	2,933.3	33.4	34.0	34.7	33.5	1.79	44.4	28.0	7,366	74.5‡	79.5‡	5.6
1999	2,937.0	32.1	35.0	34.5	33.5	1.74	46.1	28.1	7,532			6.1
2000			33.5‡						7,187‡			5.2‡
<b>Scotland</b>												
1971	5,235.6	86.7	61.6	48.2	27.1	2.53	8.1		11,444	67.3	73.7	19.9
1976	5,233.4	64.9	65.3	44.7	28.4	1.80	9.3	26.0	11,675	68.2	74.4	14.8
1981	5,180.2	69.1	63.8	38.2	28.4	1.84	12.2	26.3	10,849	69.1	75.3	11.3
1986	5,123.0	65.8	63.5	33.5	28.0	1.67	20.6	26.6	10,135	70.2	76.2	8.8
1991	5,107.0	67.0	61.0	32.2	28.7	1.69	29.1	27.4	9,254	71.4	77.1	7.1
1994	5,132.4	61.7	59.3	32.3	28.7	1.58	31.2	28.2	8,840	71.9	77.4	6.2
1995	5,136.6	60.1	60.5	32.5	28.7	1.55	33.7	28.4	8,887	72.1	77.6	6.2
1996	5,128.0	59.3	60.7	32.6	28.6	1.55	36.0	28.5	8,868	72.2	77.8	6.2
1997	5,122.5	59.4	59.5	32.5	28.7	1.58	37.7	28.6	8,623	72.4	77.9	5.3
1998	5,120.0	57.3	59.2	32.3	28.7	1.55	39.0	28.8	8,533	72.6‡	78.1‡	5.5
1999	5,119.2	55.1	60.3	32.0	28.8	1.51	41.2	28.9	8,618			5.0
2000			57.8‡						8,275‡			5.7‡
<b>Northern Ireland†††</b>												
1971	1,540.4	31.8	17.6	56.6	24.0	3.13	3.8		11,607	67.6	73.7	22.7
1976	1,523.5	26.4	17.0	56.1	25.3	2.70	5.0	27.4	11,746	67.5	73.8	18.3
1981	1,543.0	27.2	16.3	50.6	25.3	2.59	7.0	27.5	10,567	69.2	75.5	13.2
1986	1,573.5	28.0	16.1	46.5	24.7	2.44	12.8	27.5	10,071	70.9	77.1	10.2
1991	1,607.3	26.0	15.1	44.0	25.6	2.16	20.3	28.0	8,564	72.6	78.4	7.4
1994	1,647.9	24.1	15.1	43.6	25.4	1.94	22.1	28.6	8,256	73.1	78.6	6.1
1995	1,654.9	23.7	15.3	43.3	25.4	1.91	23.2	28.8	8,255	73.5	78.9	7.1
1996	1,669.1	24.4	15.2	42.9	25.2	1.95	26.0	28.8	8,057	73.8	79.2	5.8
1997	1,680.3	24.1	15.0	42.3	25.1	1.92	26.7	29.0	7,810	74.2	79.5	5.6
1998	1,688.6	23.7	15.0	41.6	24.9	1.89	28.5	29.0	7,438	74.3‡	79.5‡	5.6
1999	1,691.8	23.1	15.7	40.8	25.0	1.85	30.3	29.0	7,672			6.4
2000			14.9‡						7,314‡			5.0‡

‡ Provisional.

\* Percentage of children under 16 to working population (males 16–64 and females 16–59).

† Percentage of males 65 and over and females 60 and over to working population (males 16–64 and females 16–59).

\*\* TFR (total fertility rate) is the number of children that would be born to a woman if current patterns of fertility persisted throughout her childbearing life. It is sometimes called the TPF (total period fertility rate).

†† Per million population. The age-standardised mortality rate makes allowances for changes in the age structure of the population. See Notes to tables.

\*\*\* Deaths under one year per 1,000 live births.

††† Northern Ireland data has been revised to take account of changed Northern Ireland population estimates from 1981.

Notes: 1. Some of these indicators are also in other tables. They are brought together to make comparison easier.

2. Figures for England and Wales represent the number of deaths registered in each year up to 1992, and the number of deaths occurring in each year from 1993.

3. From 1981 births to non residents mothers in Northern Ireland are excluded from the figures for Northern Ireland, but included in the figures for the United Kingdom.

Table 3.1

## Live births: age of mother

England and Wales

Numbers (thousands), rates, mean age and TFRs

Year and quarter	Age of mother at birth							Age of mother at birth							Mean age (years)	TFR†	
	All ages	Under 20	20–24	25–29	30–34	35–39	40 and over	All ages	Under 20	20–24	25–29	30–34	35–39	40 and over			
	Total live births (numbers)							Age-specific fertility rates*									
1961	811.3	59.8	249.8	248.5	152.3	77.5	23.3	89.2	37.3	172.6	176.9	103.1	48.1	15.0	27.6	2.77	
1964(max)‡	876.0	76.7	276.1	270.7	153.5	75.4	23.6	92.9	42.5	181.6	187.3	107.7	49.8	13.7	27.2	2.93	
1966	849.8	86.7	285.8	253.7	136.4	67.0	20.1	90.5	47.7	176.0	174.0	97.3	45.3	12.5	26.8	2.75	
1971	783.2	82.6	285.7	247.2	109.6	45.2	12.7	83.5	50.6	152.9	153.2	77.1	32.8	8.7	26.2	2.37	
1976	584.3	57.9	182.2	220.7	90.8	26.1	6.5	60.4	32.2	109.3	118.7	57.2	18.6	4.8	26.4	1.71	
1977(min)‡	569.3	54.5	174.5	207.9	100.8	25.5	6.0	58.1	29.4	103.7	117.5	58.6	18.2	4.4	26.5	1.66	
1981	634.5	56.6	194.5	215.8	126.6	34.2	6.9	61.3	28.1	105.3	129.1	68.6	21.7	4.9	26.8	1.80	
1986	661.0	57.4	192.1	229.0	129.5	45.5	7.6	60.6	30.1	92.7	124.0	78.1	24.6	4.8	27.0	1.77	
1991	699.2	52.4	173.4	248.7	161.3	53.6	9.8	63.6	33.0	89.3	119.4	86.7	32.1	5.3	27.7	1.82	
1992	689.7	47.9	163.3	244.8	166.8	56.7	10.2	63.5	31.7	86.2	117.3	87.2	33.4	5.8	27.9	1.80	
1993	673.5	45.1	152.0	236.0	171.1	58.8	10.5	62.6	31.0	82.7	114.1	87.0	34.1	6.2	28.1	1.76	
1994	664.7	42.0	140.2	229.1	179.6	63.1	10.7	61.9	29.0	79.4	112.1	88.7	35.8	6.4	28.4	1.75	
1995	648.1	41.9	130.7	217.4	181.2	65.5	11.3	60.4	28.5	76.8	108.6	87.3	36.2	6.8	28.5	1.72	
1996	649.5	44.7	125.7	211.1	186.4	69.5	12.1	60.5	29.8	77.5	106.9	88.6	37.2	7.2	28.6	1.73	
1997	643.1	46.4	118.6	202.8	187.5	74.9	12.9	59.8	30.2	76.6	104.8	88.8	38.9	7.6	28.8	1.73	
1998	635.9	48.3	113.5	193.1	188.5	78.9	13.6	59.0	30.9	75.5	102.2	89.9	39.8	7.8	28.9	1.72	
1999	621.9	48.4	110.7	181.9	185.3	81.3	14.3	57.6	30.8	73.7	99.2	89.2	39.8	8.1	29.0	1.70	
1997	March	158.1	11.5	29.8	50.4	45.7	17.7	3.1	59.6	31	77	105	88	38	7	28.7	1.70
	June	163.3	11.3	29.5	51.6	48.4	19.2	3.3	60.9	30	76	107	92	40	8	28.9	1.75
	Sept	164.9	11.8	30.3	52.1	48.1	19.3	3.3	60.8	30	78	107	90	40	8	28.8	1.78
	Dec	156.8	11.8	29.0	48.7	45.4	18.7	3.2	57.8	30	75	101	86	38	7	28.8	1.70
1998	March	155.8	11.7	27.8	47.9	46.2	18.8	3.3	58.7	31	74	102	89	39	8	28.9	1.68
	June	158.6	11.4	27.5	48.6	48.1	19.7	3.3	59.1	29	73	103	92	40	8	29.0	1.71
	Sept	166.1	12.7	29.8	50.6	48.9	20.7	3.6	61.2	32	79	107	93	41	8	28.9	1.81
	Dec	155.4	12.4	28.5	46.1	45.4	19.6	3.4	57.3	31	75	98	86	39	8	28.9	1.70
1999	March	152.1	12.0	27.1	45.0	45.1	19.6	3.4	57.1	31	73	99	88	39	8	28.9	1.69
	June	157.3	11.8	27.2	46.2	48.0	20.5	3.6	58.4	30	73	101	92	40	8	29.1	1.72
	Sept	160.1	12.5	28.7	46.8	47.5	20.9	3.7	58.8	32	75	102	91	41	8	29.0	1.74
	Dec	152.4	12.0	27.8	43.9	44.8	20.3	3.6	56.0	30	72	96	86	39	8	29.0	1.66
2000	March‡	148.7	11.4	26.4	42.5	44.1	20.6	3.6	55.2	29	69	95	86	40	8	29.1	1.64
	June‡	150.7	11.2	26.0	42.8	45.7	21.4	3.7	55.8	28	68	97	90	41	8	29.2	1.66
	Sept‡	154.9	11.8	27.8	43.6	46.2	21.7	3.8	56.7	29	71	98	90	41	8	29.1	1.70

\* Births per 1,000 women in the age-group; all quarterly age-specific fertility rates are adjusted for days in the quarter. They are not adjusted for seasonality, and therefore have been revised from those previously published.

† TFR (total fertility rate) is the number of children that would be born to a woman if current patterns of fertility persisted throughout her childbearing life. It is sometimes called the TPRF (total period fertility rate). During the post Second World War period the TFR reached a maximum in 1964 and a minimum in 1977.

‡ Provisional.

## Note:

The rates for women of all ages, under 20, and 40 and over are based upon the populations of women aged 15–44, 15–19, and 40–44 respectively.

**Table 3.2** Live births outside marriage: age of mother and type of registration  
 Numbers (thousands), mean age and percentages England and Wales

Year and quarter	Age of mother at birth								Mean age (years)	Age of mother at birth								Registration*		
	All ages	Under 20	20-24	25-29	30-34	35-39	40 and over	All ages		Under 20	20-24	25-29	30-34	35-39	40 and over	Joint		Sole		
																Same address†	Different address†			
Live births outside marriage (numbers)								Percentage of total live births in age-group								As a percentage of all births outside marriage				
1971	65.7	21.6	22.0	11.5	6.2	3.2	1.1	23.7	8.4	26.1	7.7	4.7	5.7	7.0	9.0	45.5		54.5		
1976	53.8	19.8	16.6	9.7	4.7	2.3	0.7	23.3	9.2	34.2	9.1	4.4	5.2	8.6	10.1	51.0		49.0		
1981	81.0	26.4	28.8	14.3	7.9	1.3	0.9	23.4	12.8	46.7	14.8	6.6	6.2	3.9	12.5	58.2		41.8		
1986	141.3	39.6	54.1	27.7	13.1	5.7	1.1	23.8	21.4	69.0	28.2	12.1	10.1	12.6	14.7	46.6	19.6	33.8		
1991	211.3	43.4	77.8	52.4	25.7	9.8	2.1	24.8	30.2	82.9	44.9	21.1	16.0	18.3	21.3	54.6	19.8	25.6		
1992	215.2	40.1	77.1	55.9	28.9	10.9	2.3	25.2	31.2	83.7	47.2	22.8	17.3	19.3	22.9	55.4	20.7	23.9		
1993	216.5	38.2	75.0	57.5	31.4	11.9	2.5	25.4	32.2	84.8	49.4	24.4	18.4	20.2	23.5	54.8	22.0	23.2		
1994	215.5	35.9	71.0	58.5	34.0	13.4	2.7	25.8	32.4	85.5	50.6	25.5	18.9	21.2	25.2	57.5	19.8	22.7		
1995	219.9	36.3	69.7	59.6	37.0	14.4	3.0	26.0	33.9	86.6	53.3	27.4	20.4	22.0	26.2	58.1	20.1	21.8		
1996	232.7	39.3	71.1	62.3	40.5	16.2	3.2	26.1	35.8	88.0	56.5	29.5	21.7	23.4	26.7	58.1	19.9	21.9		
1997	238.2	41.1	69.5	63.4	42.2	18.2	3.7	26.2	37.0	88.7	58.6	31.3	22.5	25.0	28.6	59.5	19.3	21.2		
1998	240.6	43.0	67.8	62.4	43.9	19.6	3.9	26.3	37.8	89.1	59.7	32.3	23.3	24.8	29.0	60.9	18.3	20.8		
1999	241.9	43.0	67.5	61.2	45.0	20.8	4.3	26.4	38.9	89.0	61.0	33.6	24.3	25.6	30.2	61.8	18.2	19.9		
1997 March	58.5	10.2	17.4	15.7	10.2	4.2	0.9	26.1	37.0	88.7	58.4	31.0	22.4	23.9	28.7	58.4	19.5	22.1		
June	58.9	10.1	17.1	15.5	10.6	4.7	0.9	26.3	36.1	89.1	58.0	30.1	22.0	24.3	28.4	59.6	19.4	21.0		
Sept	61.4	10.5	17.9	16.5	10.9	4.7	0.9	26.2	37.3	88.8	58.9	31.8	22.7	24.4	27.8	59.9	18.9	21.2		
Dec	59.3	10.4	17.2	15.7	10.4	4.6	0.9	26.2	37.8	88.3	59.2	32.2	23.0	24.8	29.3	60.0	19.2	20.7		
1998 March	58.5	10.4	16.5	15.3	10.7	4.6	1.0	26.3	37.5	89.0	59.5	31.9	23.1	24.4	29.6	60.5	18.4	21.1		
June	58.4	10.3	16.2	15.4	10.8	4.7	0.9	26.4	36.8	89.6	59.1	31.8	22.5	24.0	28.3	61.0	18.2	20.8		
Sept	63.2	11.3	17.9	16.3	11.5	5.2	1.0	26.3	38.1	89.2	60.0	32.3	23.6	25.2	28.5	60.9	18.4	20.7		
Dec	60.5	11.0	17.2	15.4	10.9	5.0	1.0	26.3	38.9	88.5	60.4	33.3	24.0	25.6	29.6	61.2	18.4	20.4		
1999 March	59.0	10.8	16.4	15.0	10.9	5.0	1.0	26.3	38.8	89.7	60.5	33.4	24.1	25.4	29.5	61.4	18.2	20.4		
June	59.8	10.5	16.5	15.3	11.2	5.2	1.1	26.5	38.0	89.2	60.6	33.0	23.4	25.3	31.3	61.6	18.2	20.1		
Sept	62.9	11.1	17.7	16.0	11.7	5.4	1.1	26.4	39.3	88.7	61.7	34.1	24.7	25.6	29.3	62.2	18.1	19.6		
Dec	60.2	10.6	17.0	14.9	11.1	5.3	1.1	26.4	39.5	88.4	61.2	34.0	24.8	26.2	30.8	62.0	18.4	19.5		
2000 March‡	59.0	10.2	16.5	14.8	10.9	5.4	1.2	26.5	39.7	89.7	62.6	34.8	24.7	26.1	31.7	62.5	18.1	19.5		
June‡	57.9	10.0	16.1	14.4	10.9	5.5	1.1	26.6	38.5	89.6	61.9	33.5	23.8	25.7	30.6	62.9	17.8	19.2		
Sept‡	61.7	10.6	17.6	15.3	11.3	5.7	1.2	26.5	39.8	89.7	63.3	35.0	24.4	26.5	30.5	62.7	18.1	19.2		

\* Births outside marriage can be registered by both the mother and father (joint) or by the mother alone (sole).  
 † Usual address(es) of parents.  
 ‡ Provisional.

Table 4.1

## Conceptions: age of woman at conception

England and Wales (residents)

Numbers (thousands) and rates; and percentage terminated by abortion

Year and quarter	Age of woman at conception								
	All ages	Under 16	Under 18	Under 20	20-24	25-29	30-34	35-39	40 and over
<b>(a) numbers (thousands)</b>									
1990	871.5	8.1	44.8	113.3	244.5	284.2	161.4	56.0	12.0
1991	853.7	7.5	40.1	101.6	233.3	281.5	167.5	57.6	12.1
1992	828.0	7.2	37.6	93.4	215.9	274.9	172.0	59.6	12.2
1993	819.0	7.3	35.8	87.2	203.6	271.7	181.0	63.0	12.6
1994	801.6	7.8	36.1	85.4	190.4	261.8	185.0	66.2	12.9
1995	790.3	8.1	37.9	86.6	181.1	250.3	190.3	68.7	13.2
1996	816.9	8.9	43.5	94.9	179.8	252.6	200.0	75.5	14.1
1997	800.4	8.3	43.4	96.0	167.3	242.6	200.9	78.9	14.7
1998	797.0	8.5	44.1	101.6	163.3	232.4	201.4	82.9	15.4
1999‡	773.7	7.9	42.0	98.7	157.6	218.3	197.0	86.0	16.0
1997 March	194.1	2.0	10.6	23.2	41.6	59.4	47.7	18.6	3.6
June	198.5	2.2	11.0	23.9	41.8	59.9	49.8	19.5	3.8
Sept	199.2	2.0	10.4	23.3	40.4	60.7	51.2	19.9	3.6
Dec	208.6	2.1	11.4	25.6	43.5	62.6	52.2	20.8	3.8
1998 March	196.5	2.1	11.2	25.3	41.1	57.7	48.9	19.9	3.6
June	196.0	2.1	11.0	25.3	40.5	56.8	49.0	20.5	3.8
Sept	200.8	2.1	10.7	24.7	40.0	59.1	51.9	21.1	3.9
Dec	203.7	2.1	11.2	26.3	41.7	58.9	51.5	21.3	4.0
1999 March‡	191.5	1.9	10.4	24.9	39.6	54.3	48.4	20.6	3.8
June‡	190.4	2.0	10.5	24.4	39.1	53.8	47.9	21.2	4.1
Sept‡	194.0	2.0	10.4	24.1	38.4	54.7	50.7	22.0	4.1
Dec‡	197.7	2.1	10.7	25.3	40.5	55.5	50.1	22.2	4.1
2000 March‡	192.9	2.0	10.5	25.1	40.3	53.1	48.3	21.9	4.2
<b>(b) rates (conceptions per thousand women in age-group)</b>									
1990	79.2	9.5	47.7	68.0	124.0	138.0	89.7	33.6	6.6
1991	77.7	8.9	44.6	64.1	120.2	135.1	90.1	34.4	6.6
1992	76.3	8.4	43.6	61.9	114.0	131.7	89.9	35.1	6.9
1993	76.1	8.1	42.5	59.9	110.8	131.4	92.0	36.5	7.4
1994	74.7	8.3	42.0	58.9	107.8	128.1	91.3	37.5	7.6
1995	73.7	8.6	42.0	58.9	106.3	125.0	91.7	37.9	7.9
1996	76.1	9.5	46.4	63.3	110.9	127.9	95.1	40.4	8.4
1997	74.4	8.9	45.9	62.6	108.0	125.4	95.2	41.0	8.7
1998	74.0	9.0	47.0	64.9	108.5	123.0	96.0	41.8	8.9
1999‡	71.7	8.3	45.0	62.8	104.8	119.1	94.8	42.1	9.1
1997 March	73.2	8.6	45.5	61.9	107.1	123.6	91.7	39.6	8.5
June	74.1	9.4	46.8	62.6	107.5	123.8	94.6	40.8	8.9
Sept	73.5	8.5	43.9	60.2	103.8	124.9	96.3	41.0	8.3
Dec	76.9	8.9	47.8	65.6	112.7	129.6	98.4	42.4	8.9
1998 March	74.1	9.1	48.3	66.0	109.7	122.7	94.3	41.3	8.5
June	73.0	9.0	47.1	65.0	107.5	120.1	93.7	41.7	8.9
Sept	73.9	8.9	45.4	62.7	105.4	124.5	98.3	42.1	9.0
Dec	75.0	8.9	47.3	66.6	109.9	125.1	97.8	42.1	9.2
1999 March‡	72.0	8.0	45.2	64.3	106.8	118.8	94.1	41.3	8.8
June‡	70.8	8.5	44.9	62.3	104.3	117.3	92.3	41.7	9.2
Sept‡	71.2	8.1	44.0	60.8	101.0	118.9	96.9	42.7	9.1
Dec‡	72.5	8.4	45.3	63.6	105.9	121.5	96.3	42.8	9.1
2000 March‡	71.6	8.5	44.8	63.7	106.2	118.9	94.5	42.5	9.3
<b>(c) percentage terminated by abortion</b>									
1990	19.9	50.8	41.1	35.7	22.3	13.5	13.8	23.1	43.2
1991	19.4	51.1	39.9	34.5	22.2	13.4	13.7	22.0	41.6
1992	19.3	48.6	39.1	33.9	22.3	13.9	13.9	22.2	41.5
1993	19.2	49.9	39.2	34.3	22.8	13.9	13.5	21.5	40.2
1994	19.5	50.3	39.8	34.7	23.4	14.3	13.6	21.1	40.9
1995	19.7	47.6	38.7	34.6	24.2	14.8	13.6	20.7	38.0
1996	20.8	49.2	40.0	36.2	25.7	15.6	14.1	21.2	37.6
1997	21.3	49.7	40.6	36.8	26.7	16.4	14.2	21.0	38.0
1998	22.3	52.4	42.0	37.8	27.8	17.1	14.9	21.5	37.9
1999‡	22.6	52.7	43.1	38.6	28.5	17.5	14.8	21.2	37.0
1997 March	21.4	48.4	39.7	36.0	26.6	16.6	14.5	21.0	38.6
June	21.7	49.5	40.3	36.7	27.1	16.8	14.6	21.9	39.1
Sept	20.5	48.1	40.6	36.6	25.8	15.8	13.5	20.7	36.4
Dec	21.6	52.5	41.6	37.6	27.2	16.5	14.3	20.6	37.8
1998 March	22.3	51.4	41.2	37.3	27.7	17.3	15.2	21.7	37.0
June	22.8	52.7	42.2	38.2	28.4	17.6	15.3	22.2	38.9
Sept	21.7	52.5	42.2	37.9	27.3	16.6	14.4	21.3	37.6
Dec	22.2	53.0	42.3	37.7	28.0	17.0	14.7	21.0	38.2
1999 March‡	22.3	51.4	41.9	38.0	27.9	17.2	14.7	21.6	36.2
June‡	23.0	52.9	43.5	38.6	28.6	18.0	15.5	21.5	37.8
Sept‡	22.1	52.7	43.1	38.7	28.5	17.2	14.1	20.6	37.3
Dec‡	22.8	53.6	43.6	39.1	29.2	17.7	14.7	21.2	36.7
2000 March‡	22.9	53.8	44.2	39.6	29.6	17.7	14.5	20.4	35.2

‡ Provisional

Notes: 1. Conceptions are estimates derived from birth registrations and abortion notifications.

2. Rates for women of all ages, under 16, under 18, under 20 and 40 and over are based on the population of women aged 15-44, 13-15, 15-17, 15-19 and 40-44 respectively.

**Table 4.2** **Abortions: residents and non-residents; age and gestation (residents only)** England and Wales  
 Numbers (thousands) and rates; and percentages for gestation weeks

Year and quarter	All ages			All women (residents)							Gestation weeks (percentages)			
	All** women	Residents**	Non-** residents	Age group							Gestation weeks (percentages)			
				Under 16	16-19	20-24	25-29	30-34	35-44	45 and over	Under 9	9-12	13-19	20 and over
<b>Numbers (thousands)</b>											<b>Percentages</b>			
1971	126.8	94.6	32.2	2.3	18.2	24.5	17.3	14.2	15.9	0.5	16.6	57.9	21.8	1.0
1976	129.7	101.9	27.8	3.4	24.0	23.6	19.3	14.6	14.7	0.5	24.8	55.8	15.0	1.1
1981	162.5	128.6	33.9	3.5	31.4	34.3	21.9	18.7	17.6	0.6	31.0	53.4	13.5	1.3
1986	172.3	147.6	24.7	3.9	33.8	45.3	28.7	18.0	17.5	0.4	33.4	53.8	11.5	1.4
1991	179.5	167.4	12.1	3.2	31.1	52.7	38.6	23.4	17.9	0.4	35.2	52.9	10.6	1.2
1992	172.1	160.5	11.6	3.0	27.6	49.0	38.4	23.9	18.1	0.5	36.8	51.8	10.3	1.2
1993	168.7	157.8	10.9	3.1	25.8	46.8	38.1	24.7	18.8	0.5	39.2	49.7	9.9	1.2
1994	166.9	156.5	10.3	3.2	25.1	44.9	38.1	25.5	19.1	0.4	40.5	48.4	9.9	1.2
1995	163.6	154.3	9.3	3.2	24.9	43.4	37.3	25.8	19.2	0.5	41.9	47.3	9.6	1.2
1996	177.5	167.9	9.6	3.6	28.8	46.4	39.3	28.2	21.1	0.4	40.0	48.7	10.1	1.3
1997	179.7	170.1	9.6	3.4	29.9	45.0	40.2	28.9	22.3	0.5	41.2	47.9	9.6	1.2
1998	187.4	177.9	9.5	3.8	33.2	45.8	40.4	30.4	23.7	0.5	41.4	47.6	9.7	1.3
1999	183.2	173.7	9.5	3.6	32.8	45.0	38.5	29.1	24.1	0.5	42.5	46.5	9.5	1.4
2000†	185.0†	175.1†	9.8	3.7	33.1	46.9	37.7	28.6	24.3	0.5	43.3	45.0	10.3	1.4
1996 March	45.7	43.2	2.4	0.9	7.4	12.4	10.2	7.2	5.2	0.1	38.0	50.5	10.2	1.2
June	45.5	42.9	2.5	0.9	7.3	11.9	10.1	7.2	5.4	0.1	38.9	49.3	10.5	1.4
Sept	44.0	41.6	2.4	0.9	7.1	11.2	9.8	7.0	5.4	0.1	40.0	48.3	10.3	1.4
Dec	42.4	40.1	2.2	0.9	7.0	10.8	9.3	6.8	5.2	0.1	43.1	46.3	9.3	1.3
1997 March	46.2	43.6	2.5	0.9	7.7	11.8	10.3	7.3	5.5	0.1	37.4	50.2	11.1	1.3
June	45.2	42.8	2.4	0.8	7.4	11.4	10.2	7.2	5.6	0.1	41.3	48.0	9.4	1.2
Sept	45.1	42.7	2.4	0.9	7.5	11.1	10.0	7.3	5.8	0.1	42.0	47.2	9.6	1.2
Dec	43.3	41.0	2.3	0.8	7.4	10.7	9.6	7.0	5.4	0.1	44.5	46.0	8.3	1.2
1998 March	48.4	45.9	2.5	1.0	8.7	12.0	10.5	7.7	5.8	0.1	37.5	50.4	10.8	1.3
June	46.4	44.0	2.4	0.9	8.1	11.4	10.1	7.6	5.8	0.1	40.8	48.3	9.5	1.4
Sept	46.9	44.5	2.4	1.0	8.3	11.3	10.0	7.6	6.1	0.1	42.5	46.7	9.5	1.2
Dec	45.7	43.5	2.2	0.9	8.1	11.0	9.8	7.5	5.9	0.1	44.9	45.0	8.9	1.2
1999 March	47.5	45.2	2.4	0.9	8.7	11.8	10.0	7.5	6.1	0.1	40.1	48.2	10.3	1.5
June	45.3	42.9	2.4	0.9	8.0	11.1	9.6	7.2	5.9	0.1	42.3	46.9	9.3	1.4
Sept	45.8	43.4	2.4	0.9	8.2	11.2	9.5	7.4	6.1	0.1	43.1	46.1	9.3	1.4
Dec	44.6	42.3	2.4	0.9	7.9	10.9	9.4	7.0	6.0	0.1	44.7	44.7	9.2	1.4
2000† March	49.5	46.9	2.6	1.0	9.1	12.5	10.2	7.5	6.4	0.1	38.9	47.9	11.6	1.6
June	45.8	43.3	2.5	0.9	8.1	11.8	9.2	7.1	6.0	0.1	42.3	46.0	10.3	1.4
Sept	46.0	43.4	2.5	1.0	8.1	11.5	9.5	7.2	6.0	0.1	44.6	44.0	10.1	1.4
Dec	43.3	41.1	2.2	0.9	7.7	11.1	8.8	6.7	5.8	0.1	47.9	41.7	8.9	1.4
<b>Rates (per thousand women 14-49)</b>														
1971	:	8.4	:	3.5	13.9	13.1	10.7	10.0	5.6	0.3				
1976	:	8.9	:	4.4	16.9	14.2	10.4	9.2	5.3	0.3				
1981	:	10.6	:	4.5	19.4	19.1	13.3	10.3	5.9	0.4				
1986	:	11.7	:	5.4	22.0	21.9	15.5	10.9	5.1	0.3				
1991	:	13.1	:	5.6	24.0	27.2	18.6	12.7	5.1	0.3				
1992	:	12.5	:	5.4	22.4	25.9	18.4	12.5	5.2	0.3				
1993	:	12.3	:	5.3	22.0	25.5	18.4	12.6	5.5	0.3				
1994	:	12.2	:	5.2	22.0	25.4	18.6	12.6	5.6	0.2				
1995	:	12.0	:	5.2	21.7	25.5	18.6	12.4	5.5	0.2				
1996	:	13.0	:	5.8	24.3	28.6	19.9	13.4	6.0	0.2				
1997	:	13.3	:	5.5	24.5	29.0	20.8	13.7	6.1	0.3				
1998	:	13.9	:	6.1	26.5	30.4	21.4	14.5	6.4	0.3				
1999	:	13.6	:	5.7	26.0	29.9	21.0	14.0	6.3	0.3				
2000†	:	13.6†	:	5.7	26.1	30.4	21.2	14.0	6.2	0.3				
1996 March	:	13.5	:	5.7	25.0	30.7	20.7	13.8	5.9	0.2				
June	:	13.4	:	5.9	24.9	29.6	20.6	13.7	6.1	0.2				
Sept	:	12.8	:	5.9	24.0	27.5	19.7	13.3	6.1	0.2				
Dec	:	12.4	:	5.8	23.5	26.5	18.7	12.9	5.8	0.3				
1997 March	:	13.8	:	5.7	25.5	30.8	21.7	14.1	6.2	0.2				
June	:	13.4	:	5.4	24.1	29.6	21.1	13.8	6.2	0.3				
Sept	:	13.2	:	5.7	24.3	28.3	20.6	13.8	6.3	0.3				
Dec	:	12.7	:	5.3	24.0	27.4	19.7	13.1	5.9	0.3				
1998 March	:	14.6	:	6.4	28.2	32.4	22.4	14.9	6.4	0.3				
June	:	13.8	:	5.8	26.0	30.4	21.4	14.5	6.3	0.3				
Sept	:	13.8	:	6.1	26.2	29.9	21.1	14.4	6.6	0.3				
Dec	:	13.5	:	5.9	25.7	29.1	20.5	14.3	6.3	0.3				
1999 March	:	14.1	:	5.9	27.6	31.4	21.7	14.5	6.4	0.3				
June	:	13.4	:	5.4	25.5	29.6	20.9	13.9	6.2	0.3				
Sept	:	13.6	:	5.6	26.0	29.8	20.8	14.1	6.4	0.3				
Dec	:	13.2	:	5.8	25.0	29.0	20.5	13.5	6.3	0.3				
2000† March	:	14.6	:	6.2	28.6	32.5	23.0	14.7	6.6	0.3				
June	:	13.5	:	5.5	25.6	30.5	20.8	13.9	6.2	0.3				
Sept	:	13.5	:	5.9	25.6	29.8	21.3	14.2	6.2	0.3				
Dec	:	12.8	:	5.3	24.3	28.8	19.9	13.2	5.9	0.2				

† Provisional.  
 \* The denominators used to calculate rates are population projections (1998-based). Rates for Under 16 and 45 and over are based on female populations aged 14-15 and 45-49 respectively.  
 \*\* Includes cases with not stated age and/or gestation weeks.  
 † Includes incomplete forms that have been returned to practitioners.

Table 5.1

## Expectation of life (in years) at birth and selected age

Constituent countries of the United Kingdom

Year	Males								Year	Females							
	At birth	At age								At birth	At age						
		5	20	30	50	60	70	80			5	20	30	50	60	70	80
<b>United Kingdom*</b>																	
1971	68.8	65.3	50.9	41.3	23.0	15.3	9.5	5.5	1971	75.0	71.4	56.7	47.0	28.3	19.8	12.5	6.9
1976	69.6	66.0	51.4	41.9	23.4	15.7	9.6	5.6	1976	75.2	72.0	57.3	47.5	28.7	20.3	12.9	7.2
1981	70.8	66.9	52.3	42.7	24.1	16.3	10.1	5.8	1981	76.8	72.7	57.9	48.1	29.2	20.8	13.3	7.5
1986	71.9	67.8	53.2	43.6	24.9	16.8	10.5	6.0	1986	77.7	73.5	58.7	48.9	29.8	21.2	13.8	7.9
1991	73.2	68.9	54.3	44.7	26.0	17.7	11.1	6.4	1991	78.8	74.4	59.6	49.7	30.7	21.9	14.4	8.4
1993	73.7	69.3	54.6	45.1	26.4	18.0	11.3	6.5	1993	79.1	74.6	59.8	50.0	30.9	22.1	14.5	8.4
1994	73.9	69.5	54.8	45.2	26.5	18.1	11.3	6.5	1994	79.2	74.7	59.9	50.1	31.0	22.2	14.5	8.4
1995	74.1	69.7	55.0	45.5	26.8	18.4	11.5	6.6	1995	79.4	74.9	60.1	50.3	31.2	22.4	14.6	8.5
1996	74.3	69.9	55.2	45.7	26.9	18.5	11.6	6.7	1996	79.5	75.0	60.1	50.3	31.2	22.4	14.6	8.5
1997	74.6	70.2	55.5	45.9	27.2	18.8	11.8	6.7	1997	79.6	75.1	60.3	50.5	31.4	22.6	14.7	8.5
1998‡	74.8	70.4	55.7	46.1	27.4	19.0	11.9	6.8	1998‡	79.8	75.3	60.4	50.6	31.5	22.6	14.8	8.6
<b>England and Wales</b>																	
1971	69.0	65.6	51.1	41.5	23.1	15.4	9.5	5.5	1971	75.2	71.6	56.9	47.1	28.4	20.0	12.6	7.0
1976	69.9	66.2	51.6	42.1	23.5	15.8	9.7	5.7	1976	76.0	72.2	57.4	47.7	28.8	20.4	13.0	7.2
1981	71.0	67.1	52.5	42.9	24.3	16.4	10.1	5.8	1981	77.0	72.9	58.1	48.3	29.4	20.9	13.4	7.5
1986	72.1	68.0	53.4	43.8	25.0	16.9	10.6	6.1	1986	77.9	73.6	58.9	49.0	30.0	21.4	13.9	7.9
1991	73.4	69.1	54.5	44.9	26.2	17.9	11.2	6.4	1991	79.0	74.6	59.8	49.9	30.8	22.1	14.5	8.4
1993	74.0	69.6	54.9	45.3	26.5	18.2	11.4	6.5	1993	79.3	74.8	60.0	50.2	31.1	22.3	14.6	8.5
1994	74.1	69.7	55.0	45.4	26.7	18.3	11.4	6.5	1994	79.4	74.9	60.1	50.3	31.2	22.3	14.6	8.5
1995	74.4	70.0	55.2	45.7	26.9	18.5	11.6	6.6	1995	79.6	75.1	60.3	50.4	31.3	22.5	14.7	8.6
1996	74.6	70.2	55.4	45.9	27.1	18.7	11.7	6.7	1996	79.7	75.2	60.3	50.5	31.4	22.6	14.7	8.6
1997	74.8	70.4	55.7	46.1	27.4	18.9	11.9	6.8	1997	79.8	75.3	60.5	50.7	31.6	22.7	14.8	8.6
1998‡	75.1	70.7	55.9	46.4	27.6	19.1	12.0	6.9	1998‡	80.0	75.5	60.6	50.8	31.7	22.8	14.9	8.6
<b>England</b>																	
1981	71.1	67.1	52.5	42.9	24.3	16.4	10.1	5.8	1981	77.0	72.9	58.2	48.4	29.4	20.9	13.4	7.5
1986	72.2	68.1	53.4	43.8	25.1	17.0	10.6	6.1	1986	77.9	73.7	58.9	49.1	30.0	21.4	13.9	7.9
1991	73.4	69.1	54.5	44.9	26.2	17.9	11.2	6.4	1991	79.0	74.6	59.8	49.9	30.9	22.1	14.5	8.4
1993	74.0	69.6	54.9	45.3	26.6	18.2	11.4	6.5	1993	79.3	74.9	60.0	50.2	31.1	22.3	14.6	8.5
1994	74.1	69.7	55.0	45.4	26.7	18.3	11.4	6.5	1994	79.4	74.9	60.1	50.3	31.2	22.3	14.6	8.5
1995	74.4	70.0	55.2	45.7	26.9	18.5	11.6	6.6	1995	79.6	75.1	60.3	50.4	31.3	22.5	14.7	8.6
1996	74.6	70.2	55.5	45.9	27.2	18.7	11.7	6.7	1996	79.7	75.2	60.4	50.6	31.4	22.6	14.7	8.6
1997	74.9	70.5	55.7	46.2	27.4	18.9	11.9	6.8	1997	79.9	75.4	60.5	50.7	31.6	22.7	14.8	8.6
1998‡	75.1	70.7	56.0	46.4	27.6	19.1	12.0	6.9	1998‡	80.0	75.5	60.6	50.8	31.7	22.8	14.9	8.6
<b>Wales</b>																	
1981	70.4	66.5	51.9	42.2	23.6	15.8	9.7	5.5	1981	76.4	72.3	57.5	47.7	28.9	20.4	13.1	7.4
1986	71.6	67.5	52.9	43.3	24.6	16.6	10.4	6.0	1986	77.6	73.3	58.5	48.7	29.7	21.1	13.8	7.8
1991	73.2	68.9	54.2	44.6	25.9	17.6	11.0	6.4	1991	78.9	74.4	59.6	49.8	30.7	21.9	14.4	8.4
1993	73.5	69.1	54.4	44.9	26.1	17.8	11.2	6.6	1993	79.0	74.5	59.7	49.9	30.8	22.0	14.4	8.4
1994	73.5	69.1	54.4	44.9	26.2	17.9	11.1	6.5	1994	79.0	74.5	59.7	49.8	30.8	22.0	14.4	8.4
1995	73.8	69.4	54.7	45.2	26.5	18.1	11.3	6.6	1995	79.2	74.7	59.8	50.0	30.9	22.2	14.5	8.5
1996	74.0	69.5	54.8	45.4	26.6	18.3	11.4	6.5	1996	79.2	74.7	59.8	50.0	31.0	22.2	14.5	8.5
1997	74.4	69.9	55.2	45.7	27.0	18.6	11.6	6.8	1997	79.4	74.9	60.0	50.2	31.1	22.4	14.6	8.5
1998‡	74.5	70.1	55.4	45.9	27.1	18.7	11.7	6.8	1998‡	79.5	75.0	60.1	50.3	31.2	22.4	14.6	8.5
<b>Scotland</b>																	
1971	67.3	64.0	49.5	40.1	22.0	14.6	9.1	5.4	1971	73.7	70.1	55.4	45.6	27.2	19.0	11.9	6.7
1976	68.2	64.4	49.9	40.4	22.3	14.9	9.2	5.3	1976	74.4	70.6	55.9	46.1	27.6	19.4	12.4	6.9
1981	69.1	65.2	50.6	41.1	22.9	15.4	9.5	5.5	1981	75.3	71.2	56.4	46.7	27.9	19.7	12.7	7.2
1986	70.2	66.0	51.4	41.9	23.5	15.8	9.9	5.7	1986	76.2	71.9	57.1	47.3	28.4	20.1	13.0	7.5
1991	71.4	67.1	52.5	43.0	24.6	16.6	10.4	6.1	1991	77.1	72.6	57.8	48.1	29.1	20.6	13.4	7.8
1993	71.7	67.3	52.7	43.2	24.8	16.8	10.5	6.0	1993	77.3	72.8	58.0	48.2	29.3	20.7	13.4	7.8
1994	71.9	67.5	52.8	43.4	24.9	16.9	10.6	6.1	1994	77.4	72.9	58.1	48.3	29.4	20.8	13.5	7.8
1995	72.1	67.7	53.1	43.6	25.2	17.2	10.8	6.2	1995	77.6	73.2	58.3	48.6	29.6	21.0	13.7	7.9
1996	72.2	67.8	53.1	43.7	25.3	17.3	10.9	6.3	1996	77.8	73.2	58.4	48.7	29.7	21.1	13.7	7.9
1997	72.4	67.9	53.3	43.9	25.5	17.5	11.0	6.4	1997	77.9	73.4	58.6	48.8	29.9	21.3	13.8	7.9
1998‡	72.6	68.1	53.5	44.1	25.7	17.7	11.1	6.4	1998‡	78.1	73.5	58.7	48.9	29.9	21.3	13.8	7.9
<b>Northern Ireland*</b>																	
1981	69.2	65.4	50.9	41.5	23.2	15.6	9.7	5.8	1981	75.5	71.6	56.8	47.1	28.3	20.0	12.8	7.3
1986	70.9	66.8	52.2	42.7	24.2	16.4	10.4	6.2	1986	77.1	72.9	58.1	48.3	29.3	20.8	13.4	7.8
1991	72.6	68.2	53.6	44.1	25.5	17.3	11.0	6.4	1991	78.4	74.0	59.2	49.4	30.3	21.6	14.2	8.3
1993	73.0	68.6	54.0	44.6	25.8	17.6	11.1	6.5	1993	78.7	74.3	59.4	49.6	30.6	21.8	14.3	8.4
1994	73.1	68.8	54.2	44.7	26.0	17.8	11.2	6.6	1994	78.6	74.2	59.4	49.6	30.6	21.9	14.3	8.4
1995	73.5	69.1	54.5	45.0	26.3	18.0	11.3	6.6	1995	78.9	74.5	59.6	49.8	30.8	22.0	14.4	8.4
1996	73.8	69.4	54.7	45.2	26.5	18.2	11.3	6.6	1996	79.2	74.7	59.9	50.0	30.9	22.1	14.4	8.4
1997	74.2	69.7	55.0	45.5	26.8	18.3	11.5	6.6	1997	79.5	75.0	60.2	50.3	31.2	22.4	14.6	8.4
1998‡	74.3	69.8	55.1	45.6	26.9	18.5	11.6	6.6	1998‡	79.5	75.0	60.2	50.4	31.3	22.4	14.5	8.3

Note: Figures from 1981 are calculated from the population estimates revised in the light of the 1991 Census. All figures are based on a three-year period; see Notes to tables for further information.

‡ Provisional.

\* United Kingdom and Northern Ireland data has been revised to take account of changed Northern Ireland population estimates from 1981.

Table 6.1

Deaths: age and sex\*\*  
Numbers (thousands) and rates

England and Wales

Year and quarter	All ages	Age group												
		Under 1*	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85 and over
<b>Numbers (thousands)</b>														
<b>Males</b>														
1971	288.4	7.97	1.23	0.92	0.69	1.54	1.77	3.05	6.68	21.0	55.7	89.8	71.9	26.1
1976	300.1	4.88	0.88	0.68	0.64	1.66	1.66	3.24	5.93	20.4	52.0	98.7	80.3	29.0
1981	289.0	4.12	0.65	0.45	0.57	1.73	1.58	3.18	5.54	16.9	46.9	92.2	86.8	28.5
1986	287.9	3.72	0.57	0.32	0.38	1.43	1.75	3.10	5.77	14.4	43.6	84.4	96.2	32.2
1991	277.6	2.97	0.55	0.34	0.35	1.21	1.76	3.69	6.16	13.3	34.9	77.2	95.8	39.3
1994	267.6	2.37	0.43	0.28	0.33	0.84	1.55	4.07	5.77	12.9	31.3	76.3	88.2	43.2
1995	274.4	2.31	0.39	0.27	0.34	0.91	1.53	4.04	5.88	13.5	31.0	75.0	92.3	47.1
1996	268.7	2.27	0.44	0.24	0.29	0.93	1.41	4.06	5.84	13.6	30.1	71.0	90.7	47.8
1997	264.9	2.14	0.41	0.27	0.33	0.95	1.44	3.94	5.71	13.5	28.9	68.0	90.2	49.1
1998	264.7	2.07	0.41	0.24	0.29	0.88	1.29	4.01	5.90	13.6	29.1	66.1	90.5	50.4
1999	264.3	2.08	0.41	0.22	0.28	0.90	1.27	3.85	5.93	13.6	28.7	64.3	90.4	52.3
2000‡	256.7	1.90	0.35	0.23	0.26	0.90	1.33	3.85	6.14	13.4	28.0	60.8	87.4	52.1
<b>Females</b>														
1971	278.9	5.75	0.98	0.57	0.42	0.63	0.79	1.84	4.53	13.3	30.8	64.0	95.0	60.4
1976	298.5	3.46	0.59	0.45	0.42	0.62	0.67	1.94	4.04	12.8	29.6	67.1	104.7	72.1
1981	288.9	2.90	0.53	0.30	0.37	0.65	0.64	1.82	3.74	10.5	27.2	62.8	103.6	73.9
1986	293.3	2.59	0.49	0.25	0.27	0.56	0.67	1.65	3.83	8.8	25.8	58.4	106.5	83.6
1991	292.5	2.19	0.44	0.25	0.22	0.46	0.64	1.73	3.70	8.4	21.3	54.2	103.3	95.7
1994	285.6	1.75	0.36	0.19	0.20	0.36	0.54	1.77	3.67	8.7	19.0	53.9	94.2	101.0
1995	295.2	1.68	0.33	0.20	0.21	0.38	0.50	1.86	3.64	9.0	18.9	53.0	97.2	108.4
1996	291.5	1.69	0.32	0.18	0.20	0.43	0.51	1.85	3.66	8.9	18.2	50.2	96.7	108.7
1997	290.4	1.66	0.30	0.18	0.21	0.43	0.49	1.72	3.74	9.0	18.0	48.3	95.5	110.9
1998	290.3	1.56	0.31	0.18	0.19	0.41	0.48	1.72	3.68	9.1	17.9	46.9	94.7	113.2
1999	291.8	1.55	0.30	0.17	0.22	0.39	0.47	1.67	3.79	9.0	18.0	45.1	93.9	117.2
2000‡	281.2	1.50	0.26	0.16	0.19	0.40	0.50	1.70	3.85	9.1	17.7	42.3	89.7	113.8
<b>Rates (deaths per 1,000 population in each age group)</b>														
<b>Males</b>														
1971	12.1	19.8	0.76	0.44	0.37	0.90	0.93	0.97	2.31	7.07	20.1	50.5	113.0	231.8
1976	12.5	16.2	0.65	0.34	0.31	0.88	0.96	0.92	2.09	6.97	19.6	50.3	116.4	243.2
1981	12.0	12.6	0.53	0.27	0.29	0.82	0.83	0.89	1.83	6.11	17.7	45.6	105.2	226.5
1986	11.8	11.0	0.44	0.21	0.23	0.71	0.82	0.87	1.67	5.27	16.6	42.9	101.1	214.8
1991	11.2	8.3	0.40	0.21	0.23	0.69	0.86	0.94	1.76	4.62	13.8	38.5	93.6	197.1
1994	10.6	6.9	0.31	0.16	0.20	0.55	0.83	0.96	1.66	3.99	12.4	36.2	89.5	188.6
1995	10.8	6.9	0.28	0.15	0.21	0.58	0.86	0.95	1.67	4.08	12.3	36.1	89.4	196.0
1996	10.5	7.0	0.32	0.13	0.18	0.58	0.83	0.95	1.62	4.02	12.0	34.5	85.1	192.1
1997	10.3	6.5	0.31	0.15	0.19	0.58	0.89	0.93	1.54	3.94	11.5	33.2	82.5	190.3
1998	10.3	6.4	0.31	0.14	0.17	0.53	0.82	0.96	1.55	3.94	11.3	32.4	81.2	187.2
1999	10.2	6.5	0.31	0.12	0.16	0.54	0.80	0.93	1.51	3.93	10.9	31.6	80.1	187.9
2000‡	9.9	6.1	0.26	0.13	0.15	0.54	0.84	0.93	1.56	3.85	10.6	29.9	77.5	187.2
1999 March	12.0	7.2	0.35	0.13	0.17	0.58	0.92	0.93	1.67	4.24	12.0	36.6	95.6	236.9
1999 June	9.4	6.2	0.28	0.12	0.15	0.55	0.78	0.98	1.50	3.79	10.5	29.6	73.5	162.8
1999 Sept	9.0	6.3	0.28	0.12	0.13	0.52	0.75	0.85	1.45	3.65	10.1	28.2	70.0	156.4
1999 Dec	10.4	6.3	0.31	0.13	0.18	0.52	0.76	0.98	1.43	4.04	11.0	32.2	81.6	196.4
2000 March‡	11.8	6.4	0.33	0.13	0.15	0.54	0.95	0.97	1.67	4.21	12.4	35.1	94.5	237.5
2000 June‡	9.4	6.3	0.26	0.12	0.16	0.49	0.71	0.88	1.53	3.82	10.3	28.8	73.0	172.2
2000 Sept‡	8.7	5.9	0.19	0.11	0.14	0.50	0.81	0.89	1.47	3.53	9.5	26.9	67.7	157.5
2000 Dec‡	9.6	5.9	0.25	0.16	0.15	0.64	0.88	0.99	1.59	3.87	10.4	28.9	75.0	182.6
<b>Females</b>														
1971	11.0	15.1	0.63	0.29	0.24	0.39	0.42	0.60	1.59	4.32	10.0	26.1	73.6	185.7
1976	11.8	12.2	0.46	0.24	0.21	0.35	0.40	0.56	1.46	4.30	10.1	26.0	74.6	196.6
1981	11.3	9.4	0.46	0.19	0.19	0.32	0.35	0.52	1.26	3.80	9.5	24.1	66.2	178.2
1986	11.4	8.0	0.40	0.17	0.17	0.29	0.33	0.47	1.12	3.23	9.2	23.4	62.5	171.0
1991	11.3	6.4	0.33	0.16	0.15	0.28	0.33	0.45	1.06	2.91	8.1	22.0	58.6	163.8
1994	10.9	5.4	0.27	0.11	0.13	0.25	0.30	0.44	1.06	2.68	7.3	21.3	56.9	146.6
1995	11.2	5.3	0.25	0.12	0.13	0.26	0.29	0.46	1.05	2.72	7.3	21.4	57.1	153.1
1996	11.0	5.4	0.24	0.10	0.12	0.29	0.31	0.45	1.03	2.62	7.1	20.7	55.8	150.8
1997	10.9	5.3	0.23	0.10	0.13	0.28	0.32	0.42	1.03	2.63	6.9	20.2	54.6	151.8
1998	10.9	5.0	0.24	0.11	0.12	0.26	0.32	0.43	0.99	2.62	6.8	19.9	53.9	151.5
1999	10.9	5.1	0.24	0.10	0.13	0.25	0.31	0.43	0.99	2.60	6.7	19.3	53.5	154.8
2000‡	10.5	5.1	0.20	0.10	0.12	0.26	0.34	0.44	1.01	2.63	6.6	18.1	51.1	150.3
1999 March	13.4	5.7	0.29	0.13	0.15	0.28	0.33	0.47	1.07	2.83	7.3	22.7	65.5	199.7
1999 June	9.8	5.1	0.23	0.06	0.12	0.22	0.33	0.42	0.97	2.53	6.3	17.7	48.1	134.9
1999 Sept	9.4	4.7	0.18	0.10	0.11	0.24	0.28	0.40	0.91	2.45	6.3	17.2	46.2	127.4
1999 Dec	11.1	5.0	0.25	0.11	0.13	0.24	0.32	0.42	1.03	2.61	6.9	19.7	54.3	157.9
2000 March‡	13.0	5.5	0.23	0.10	0.13	0.27	0.32	0.46	1.08	2.84	7.4	21.4	63.0	195.3
2000 June‡	9.7	4.7	0.22	0.08	0.10	0.24	0.30	0.42	0.97	2.56	6.3	17.3	47.6	134.4
2000 Sept‡	9.1	5.1	0.17	0.08	0.10	0.25	0.36	0.45	0.97	2.52	6.1	16.4	44.0	125.4
2000 Dec‡	10.3	5.0	0.20	0.12	0.13	0.26	0.35	0.41	1.02	2.59	6.5	17.6	49.9	146.7

\* Rates per 1,000 live births. ‡ Provisional registrations.

\*\* 1998 deaths figures for England and Wales in *Health Statistics Quarterly* 03 and 04 were incorrectly shown as being final when they were still provisional. The final 1998 figures are those shown here.  
Note: Figures represent the numbers of deaths registered in each year up to 1992 and the numbers of deaths occurring in each year from 1993.

Table 6.2

Deaths: subnational\*\*  
Rates

Health Regional Office areas of England\*

Year and quarter	Northern and Yorkshire	Trent	Eastern	London	South East	South West	West Midlands	North West
<b>Total deaths (deaths per 1,000 population of all ages)</b>								
1993	11.8	11.4	10.4	9.9	10.9	12.0	11.0	12.1
1994	11.2	10.8	10.1	9.4	10.4	11.4	10.5	11.5
1995	11.3	11.0	10.4	9.6	10.7	11.9	10.9	11.6
1996	11.2	10.9	10.2	9.2	10.6	11.5	10.6	11.5
1997	11.0	10.8	10.1	8.9	10.4	11.5	10.5	11.4
1998	11.3	11.0	10.1	8.6	10.2	11.3	10.5	11.5
1999	11.0	10.8	10.1	8.6	10.3	11.5	10.6	11.3
2000†	10.6	10.4	9.9	8.2	10.0	11.3	10.3	10.8
<b>1999 quarterly</b>								
1999 March	13.1	12.8	12.3	10.2	12.5	13.8	12.8	13.6
1999 June	10.0	9.7	9.3	7.8	9.3	10.5	9.5	10.2
1999 Sept	9.5	9.4	8.8	7.3	9.0	10.1	9.0	10.0
1999 Dec	11.3	11.1	10.3	8.9	10.5	11.5	11.1	11.2
<b>2000 quarterly</b>								
2000 March‡	12.9	12.5	12.0	10.1	12.4	13.9	12.5	12.9
2000 June‡	9.8	9.8	9.3	7.6	9.2	10.7	9.7	10.2
2000 Sept‡	9.3	9.0	8.6	7.2	8.6	9.8	9.1	9.6
2000 Dec‡	10.5	10.4	9.7	8.0	9.7	10.8	9.9	10.7
<b>Infant mortality (deaths under 1 year per 1,000 live births)</b>								
1993	6.8	7.0	5.4	6.4	5.4	5.8	7.0	6.5
1994	6.8	7.2	5.3	6.3	4.9	5.3	7.2	6.2
1995	6.6	6.4	5.2	6.4	5.2	5.3	7.1	6.6
1996	6.3	6.3	5.3	6.3	5.4	5.5	6.8	6.4
1997	6.2	5.9	4.8	5.8	5.0	5.8	7.0	6.7
1998	6.1	6.0	5.0	6.0	4.5	4.8	6.5	6.3
1999	6.0	6.1	4.6	6.0	5.0	4.7	6.9	6.5
2000†	6.9	6.0	4.4	5.4	4.5	4.7	6.9	6.3
<b>1999 quarterly</b>								
1999 March	7.3	6.5	4.5	5.5	6.0	5.8	7.6	7.4
1999 June	6.0	5.6	4.7	6.1	4.6	4.0	7.4	5.8
1999 Sept	4.8	6.4	4.4	6.2	4.6	4.0	6.4	6.7
1999 Dec	6.0	5.6	5.0	6.1	4.7	5.0	6.3	6.1
<b>2000 quarterly</b>								
2000 March‡	7.7	6.0	4.3	5.7	5.2	5.1	7.3	6.2
2000 June‡	7.4	5.6	4.5	4.9	4.3	4.8	7.2	6.1
2000 Sept‡	6.1	5.8	4.2	5.5	4.0	3.5	7.6	6.8
2000 Dec‡	6.3	6.7	4.4	5.6	4.4	5.3	5.6	6.1
<b>Neonatal mortality (deaths under 4 weeks per 1,000 live births)</b>								
1993	4.2	4.7	3.7	4.5	3.7	3.7	4.8	4.0
1994	4.5	5.0	3.4	4.2	3.3	3.4	5.4	3.9
1995	4.5	4.5	3.4	4.3	3.5	3.7	5.3	4.2
1996	4.1	4.2	3.5	4.4	3.6	3.8	4.9	4.1
1997	4.1	3.9	3.3	3.6	3.4	3.9	5.0	4.3
1998	3.8	4.2	3.4	4.1	2.9	3.3	4.8	4.1
1999	4.0	4.4	3.0	4.1	3.2	3.2	4.8	4.3
2000†	4.6	4.4	3.0	3.7	3.1	3.0	5.1	4.4
<b>1999 quarterly</b>								
1999 March	4.8	4.6	2.7	3.7	3.4	3.8	4.9	4.6
1999 June	4.1	4.1	3.0	4.1	3.2	2.6	5.7	3.8
1999 Sept	3.4	5.3	3.4	4.6	3.5	2.7	4.5	4.7
1999 Dec	3.9	3.6	2.9	3.8	2.9	4.0	4.0	4.4
<b>2000 quarterly</b>								
2000 March‡	5.2	4.3	3.0	4.2	3.3	3.0	4.7	4.6
2000 June‡	4.6	3.9	3.0	3.4	3.2	3.1	5.4	3.9
2000 Sept‡	4.6	4.6	3.0	3.8	3.0	2.3	5.9	4.9
2000 Dec‡	3.9	4.7	2.9	3.5	3.0	3.6	4.2	4.1
<b>Perinatal mortality (stillbirths and deaths under 1 week per 1,000 total births)†</b>								
1993	9.3	8.9	8.1	9.5	8.4	7.9	9.9	8.9
1994	9.2	9.1	7.8	9.5	7.6	7.9	10.6	9.2
1995	9.5	9.3	7.7	9.7	7.5	7.4	10.1	8.6
1996	8.5	8.7	7.5	9.6	7.8	7.5	10.2	8.7
1997	8.2	7.9	7.3	8.9	7.3	8.7	9.6	8.8
1998	8.6	8.7	7.4	9.0	6.8	7.3	9.3	8.8
1999	8.3	8.1	7.0	9.0	6.9	7.8	9.9	8.6
2000†	9.0	8.5	7.0	9.1	6.7	6.6	9.7	8.6
<b>1999 quarterly</b>								
1999 March	9.5	9.1	6.8	9.2	7.8	8.6	10.5	8.5
1999 June	9.0	8.1	7.7	9.0	6.7	7.0	10.8	7.9
1999 Sept	7.5	9.0	6.7	8.4	6.5	8.0	9.8	9.1
1999 Dec	7.2	6.3	6.9	9.2	6.7	7.8	8.6	8.9
<b>2000 quarterly</b>								
2000 March‡	10.0	6.8	7.1	10.0	7.7	6.4	9.9	8.9
2000 June‡	9.4	9.1	6.0	8.1	6.5	7.0	10.0	8.2
2000 Sept‡	8.1	8.8	7.3	9.5	6.6	5.9	9.5	8.5
2000 Dec‡	8.5	9.2	7.7	8.6	6.0	7.2	9.2	8.6

\* The Regional Office boundaries were revised from 1 April 1999. See *Health Statistics Quarterly 03 In Brief* for details of the changes. Earlier years' figures have been revised to reflect the new boundaries.

† In October 1992 the legal definition of a stillbirth was changed, from a baby born dead after 28 completed weeks of gestation or more, to one born dead after 24 completed weeks of gestation or more.

‡ Provisional registrations.

\*\* 1998 deaths figures for England and Wales *Health Statistics Quarterly 03* and *04* were incorrectly shown as being final when they were still provisional. The final 1998 figures are those shown here. Note: Figures represent the numbers of deaths registered in each year up to 1992 and the number of deaths occurring in each year from 1993.

Table 6.3

Deaths: selected causes (International Classification)\* and sex\*\*\*

England and Wales

Number (thousands) and rate for all deaths and age-standardised rates† per million population for selected causes

Year and quarter	All deaths		All causes	Malignant neoplasms									
				Oesophagus	Stomach	Colon, rectum, rectosigmoid junction and anus	Trachea, bronchus and lung	Melanoma of skin	Other neoplasm of skin	Breast	Cervix uteri	Ovary and other uterine	Prostate
	Number (thousands)	Rate**		(150)	(151)	(153,154)	(162)	(172)	(173)	(174)	(180)	(183)	(185)
<b>Males</b>													
1971	288.4	1,207	13,464	76	317	331	1,066	10	12	:	:	:	198
1976	300.1	1,246	13,613	84	292	339	1,091	14	12	:	:	:	211
1981	289.0	1,196	12,200	90	251	316	1,028	17	9	:	:	:	214
1986	287.9	1,177	11,349	101	224	313	949	18	9	:	:	:	263
1991	277.6	1,121	10,234	117	185	310	841	23	10	:	:	:	302
1993	279.6	1,109	10,010	123	162	294	766	25	8	:	:	:	296
1994	267.6	1,057	9,502	128	162	283	743	24	9	:	:	:	295
1995	274.4	1,079	9,582	126	148	281	712	26	9	:	:	:	296
1996	268.7	1,051	9,271	126	145	272	681	25	8	:	:	:	287
1997	264.9	1,031	9,019	125	136	267	649	25	7	:	:	:	277
1998	264.7	1,025	8,895	128	131	262	641	26	8	:	:	:	274
1999	264.3	1,017	8,779	127	126	250	609	27	7	:	:	:	270
2000‡	256.7	988	8,534	129	118	249	596	28	7	:	:	:	262
1999 Mar	74.0	1,155	9,941	122	135	252	610	24	7	:	:	:	270
1999 June	60.5	934	8,077	125	126	245	596	26	6	:	:	:	260
1999 Sept	59.0	901	7,803	125	118	243	603	29	8	:	:	:	263
1999 Dec	70.7	1,080	9,314	134	128	261	626	30	6	:	:	:	288
2000 Mar‡	75.7	1,182	10,175	138	119	254	611	29	7	:	:	:	270
2000 June‡	60.8	938	8,114	125	111	248	590	27	7	:	:	:	257
2000 Sept‡	57.1	871	7,537	122	119	248	578	28	7	:	:	:	255
2000 Dec‡	63.2	964	8,340	130	122	244	604	30	6	:	:	:	266
<b>Females</b>													
1971	278.9	1,104	8,186	40	149	255	183	14	6	379	83	127	:
1976	298.5	1,176	8,303	43	136	262	219	16	6	393	78	125	:
1981	288.9	1,134	7,433	42	111	231	252	16	5	405	69	122	:
1986	293.3	1,141	6,947	47	89	220	285	19	4	420	69	121	:
1991	292.5	1,127	6,399	49	74	207	300	18	4	401	54	118	:
1993	299.2	1,140	6,347	51	66	190	294	22	3	376	47	116	:
1994	285.6	1,085	6,039	50	66	187	298	22	4	370	42	114	:
1995	295.2	1,119	6,128	52	61	179	294	20	4	359	42	116	:
1996	291.5	1,102	5,995	51	55	174	292	20	3	343	41	122	:
1997	290.4	1,095	5,925	51	57	169	285	20	3	336	37	115	:
1998	290.3	1,091	5,874	49	54	163	291	21	3	327	35	117	:
1999	291.8	1,093	5,859	52	50	161	289	20	3	318	33	112	:
2000‡	281.2	1,053	5,651	51	47	152	285	21	3	313	33	110	:
1999 Mar	85.1	1,293	6,768	52	51	160	284	19	3	323	32	113	:
1999 June	65.1	977	5,314	55	49	156	286	20	3	313	33	109	:
1999 Sept	63.3	941	5,152	49	49	164	280	21	2	311	33	114	:
1999 Dec	78.3	1,163	6,214	50	53	162	304	18	3	323	33	111	:
2000 Mar‡	85.6	1,301	6,811	55	46	157	294	23	2	322	34	114	:
2000 June‡	64.8	973	5,282	48	48	150	278	21	2	320	30	110	:
2000 Sept‡	61.5	914	5,009	51	48	150	277	20	3	303	35	110	:
2000 Dec‡	69.2	1,029	5,522	50	46	150	290	22	4	306	34	108	:

\* The Ninth Revision of the International Classification of Diseases, 1975, came into operation in England and Wales on 1 January 1979. National Statistics has produced a publication containing details of the effect of this Revision (*Mortality statistics: comparison of the 8th and 9th revision of the International Classification of Diseases, 1978 (sample)*, (Series DHI no.10).

‡ Provisional registrations.

† Directly age-standardised to the European Standard population. See Notes to Tables.

\*\* Per 100,000 population.

\*\*\* 1998 deaths figures for England and Wales in *Health Statistics Quarterly* 03 and 04 were incorrectly shown as being final when they were still provisional. The final 1998 figures are shown here.

- Notes 1. Between 1 January 1984 and 31 December 1992, ONS applied the International Classification of Diseases Selection Rule 3 in the coding of deaths where terminal events and other 'modes of dying' such as cardiac arrest, cardiac failure, certain thromboembolic disorders, and unspecified pneumonia and bronchopneumonia, were stated by the certifier to be the underlying cause of death and other major pathology appeared on the certificate. In these cases Rule 3 allows the terminal event to be considered a direct sequel to the major pathology and that primary condition was selected as the underlying cause of death. Prior to 1984 and from 1993 onwards, such certificates are coded to the terminal event. National Statistics also introduced automated coding of cause of death in 1993, which may also affect comparisons of deaths by cause from 1993. Further details may be found in the annual volumes *Mortality statistics: Cause 1984*, Series DH2 no.11, and *Mortality statistics: Cause 1993 (revised) and 1994*, Series DH2 no.21.
2. On 1 January 1986 a new certificate for deaths within the first 28 days of life was introduced. It is not possible to assign one underlying cause of death from this certificate. The 'cause' figures for 1986 onwards therefore exclude deaths at ages under 28 days.
3. Figures represent the numbers of deaths registered in each year up to 1992, and the number of deaths occurring in each year from 1993. Provisional figures are registrations.

**Table 6.3**  
**continued**

**Deaths: selected causes (International Classification)\* and sex\*\*\***

England and Wales

Number (thousands) and rate for all deaths and age-standardised rates† per million population for selected causes

Malignant neoplasms													Year and quarter
Bladder	Leukaemia	Diabetes mellitus	Ischaemic heart disease	Cerebro-vascular disease	Pneumonia	Bronchitis, emphysema and allied conditions	Asthma	Gastric, duodenal and peptic ulcers	Chronic liver disease and cirrhosis	Chronic renal failure	Motor vehicle traffic accidents	Suicides and undetermined deaths	
(188)	(204-208)	(250)	(410-414)	(430-438)	(480-486)	(490-492, 496)	(493)	(531-533)	(571)	(585)	(E810-E819)	(E950-E959, E980-E989 exc. E9888)	
													<b>Males</b>
124	74	82	3,801	1,541	920	944	21	107	35	48	198	124	1971
128	76	91	3,930	1,357	1,237	852	17	108	45	61	170	135	1976
121	74	82	3,664	1,141	1,054	683	28	90	49	44	113	151	1981
120	75	134	3,463	1,071	460	725	33	85	56	38	130	154	1986
121	76	130	2,981	939	390	605	31	73	70	24	117	158	1991
114	69	100	2,829	794	759	566	24	67	67	21	90	149	1993
109	68	97	2,595	755	679	494	23	67	67	20	86	148	1994
111	70	100	2,535	754	753	524	20	63	75	21	83	146	1995
104	65	96	2,410	743	725	480	19	63	88	19	87	137	1996
100	66	94	2,261	714	741	475	19	61	95	17	86	140	1997
98	66	93	2,200	699	709	460	18	59	105	17	79	147	1998
93	66	93	2,082	666	759	471	17	64	110	18	79	145	1999
93	66	89	1,980	628	754	429	17	60	110	16	87	140	2000‡
94	66	102	2,342	766	1,077	654	19	76	107	22	72	154	1999 Mar
88	66	87	1,956	632	564	368	14	56	99	17	78	151	1999 June
95	66	83	1,798	574	529	337	19	55	109	15	83	149	1999 Sept
93	67	101	2,237	694	872	528	18	68	123	19	83	126	1999 Dec
96	67	109	2,354	743	1,217	662	20	75	119	20	85	147	2000 Mar‡
91	64	81	1,934	596	624	359	16	55	104	16	90	134	2000 June‡
91	70	76	1,717	560	521	310	15	54	102	14	78	133	2000 Sept‡
96	66	89	1,923	618	663	390	16	56	115	15	96	148	2000 Dec‡
													<b>Females</b>
32	47	89	1,668	1,352	623	193	25	44	26	30	80	84	1971
35	48	81	1,774	1,212	824	183	22	49	29	35	65	83	1976
35	46	66	1,601	1,012	741	155	30	57	36	28	39	81	1981
36	46	100	1,554	930	349	194	35	52	38	21	49	67	1986
34	43	95	1,404	809	324	211	30	46	45	13	44	51	1991
34	43	73	1,330	711	569	223	27	45	43	12	34	48	1993
34	42	69	1,222	677	499	202	24	43	46	12	33	44	1994
32	41	72	1,179	677	553	227	24	42	49	11	29	46	1995
31	40	67	1,126	667	534	220	21	43	52	10	29	44	1996
31	43	65	1,060	639	559	225	23	41	55	9	28	45	1997
31	40	64	1,042	634	533	225	22	40	58	11	27	43	1998
30	44	64	975	618	578	240	22	39	61	9	27	45	1999
31	39	62	907	571	549	220	21	41	62	9	29	46	2000‡
30	46	72	1,106	712	878	341	25	43	61	12	27	49	1999 Mar
30	39	61	910	580	419	169	17	36	60	7	24	45	1999 June
30	44	58	835	544	369	163	20	37	59	9	27	45	1999 Sept
31	49	66	1,051	639	649	288	25	40	65	10	31	40	1999 Dec
30	42	75	1,091	675	932	359	29	53	63	9	31	42	2000 Mar‡
31	36	58	866	543	428	177	16	37	61	9	32	46	2000 June‡
32	42	55	795	498	356	151	16	35	59	10	28	47	2000 Sept‡
31	38	61	882	571	485	195	21	39	66	8	25	50	2000 Dec‡

# Notes to tables

## Changes to tables

With the introduction of *Health Statistics Quarterly*, the previous *Population Trends* tables have been reviewed and some small changes introduced, in particular, a new table, Table 2.2, showing key demographic and health indicators for the constituent countries of the United Kingdom.

For most tables, years start at 1971 and then continue at five-year intervals until 1991. Individual years are shown thereafter. If a year is not present the data are not available.

## Population

The estimated and projected populations of an area include all those usually resident in the area, whatever their nationality. Members of HM forces stationed outside the United Kingdom are excluded. Students are taken to be resident at their term-time addresses.

Figures for the United Kingdom do not include the population of the Channel Islands or the Isle of Man.

The population estimated for mid-1991 onwards are final figures based on the 1991 Census of Population with allowance for subsequent births, deaths and migration.

## Live births

For England and Wales, figures relate to numbers occurring in a period; for Scotland and Northern Ireland, figures relate to those registered in a period. See also Note on page 63 of *Population Trends 67*.

## Perinatal mortality

In October 1992 the legal definition of a stillbirth was changed, from baby born dead after 28 completed weeks of gestation or more, to one born dead after 24 completed weeks of gestation or more.

## Expectation of life

The life tables on which these expectations are

based use current death rates to describe mortality levels for each year. Each individual year shown is based on a three-year period, so that for instance 1986 represents 1985–87. More details may be found in *Population Trends 60*, page 23.

## Deaths

Figures for England and Wales represent the numbers of deaths registered in each year up to 1992, and the number of deaths occurring in each year from 1993. Provisional figures are registrations.

Figures for both Scotland and Northern Ireland represent the number of deaths registered in each year.

## Age-standardised mortality

Directly age-standardised rates make allowances for changes in the age structure of the population. The age-standardised rate for a particular condition is that which would have occurred if the observed age-specific rates for the condition had applied in a given standard population. Tables 2.2 and 6.3 use the European Standard Population. This is a hypothetical population standard which is the same for both males and females allowing standardised rates to be compared for each sex, and between males and females.

## Abortions

Figures relate to numbers occurring in a period.

## Marriages and divorces

Marriages are tabulated according to date of solemnisation. Divorces are tabulated according to date of decree absolute, and the term 'divorces' includes decrees of nullity.

## Government Office Regions

Figures refer to Government Office Regions (GORs) of England which were adopted as

the primary classification for the presentation of regional statistics from April 1997.

## Health Regional Office areas

Figures refer to new health regions of England which are as constituted on 1 April 1996.

## Sources

Figures for Scotland and Northern Ireland shown in these tables (or included in totals for the United Kingdom or Great Britain) have been provided by their respective General Register Offices, except for the projections in Table 1.2 which are provided by the Government Actuary.

## Rounding

All figures are rounded independently; constituent parts may not add to totals. Generally numbers and rates per 1,000 population are rounded to one decimal place (e.g. 123.4); where appropriate, for small figures (below 10.0), two decimal places are given (e.g. 7.62). Figures which are provisional or estimated are given in less detail (e.g. 123 or 7.6 respectively) if their reliability does not justify giving the standard amount of detail. Where, for some other reason, figures need to be treated with particular caution, an explanation is given as a footnote.

## Latest figures

Figures for the latest quarters and years may be provisional (see note above on rounding) and will be updated in future issues when later information becomes available. Where figures are not yet available, cells are left blank. Population estimates and rates based on them may be revised in the light of results from future censuses of populations.

# Report:

## Legal abortions in England and Wales, 2000

This report provides provisional figures on terminations performed during 2000 under the Abortion Act 1967, on women normally resident in England and Wales. Provisional abortion rates for 2000 are shown in Table 4.2.

### KEY OBSERVATIONS :

- Provisional figures for 2000 show a total of 175,139 abortions were performed on residents of England and Wales, a rise of 1,443 (less than 1 per cent) compared with 1999.
- The overall abortion rate for women resident in England and Wales in 2000 was 13.6 abortions per 1,000 women aged 14–49, the same as last year (Table 4.2).
- The only change in age-specific abortion rates between 1999 and 2000 was for women in their twenties. The rate for this age group rose by two per cent from 24.9 to 25.5 abortions per 1,000 women aged 20–29.
- 74 per cent (129,892) of terminations were purchased by the NHS, the same as last year. The percentage of terminations paid for by the NHS varied by the area of the woman's usual residence from over 85 per cent of abortions to women living in Wales, Trent and Northern & Yorkshire regional offices to 63 per cent of abortions to women living in London.
- 88 per cent of terminations were performed before 13 weeks of gestation and 10 per cent between 13 and 19 weeks' gestation, both similar to last year.

### EXPLANATORY NOTES:

The figures relate to abortion notifications received by 8 March 2001.

Area of usual residence is derived from the woman's usual address of residence. Some women may have stated a temporary residence as their place of usual residence. These figures, therefore, should be treated with caution.

The data in the table relate to the Regional Offices and Health Authorities of England and Wales in existence on 1 April 2000.

Incomplete forms are returned to practitioners for clarification. Forms relating to 461 abortions in 2000 are still awaiting a reply and have not been fully processed. These abortions are only included in the total number of abortions, the number to residents and the overall abortion rate in Table 4.2. They are not included in Table 1 of the report. It is assumed that these 461 abortions were performed on residents of England and Wales.

Longer term trends are shown in Table 4.2, and the graph on page 4 shows quarterly abortion rates from 1981 to 2000.

Table 1

Legal abortions: Regional Office and health authority of residence by age group, gestation weeks and purchaser, 2000

England and Wales

Place of usual residence	Total*	Age group							Gestation weeks				Purchaser		
		Under 16	16-19	20-24	25-29	30-34	35-44	45 and over	Under 9	9-12	13-19	20+	NHS	NHS contract	Non-NHS
<b>England and Wales</b>	<b>174,678</b>	<b>3,726</b>	<b>33,069</b>	<b>46,894</b>	<b>37,670</b>	<b>28,597</b>	<b>24,255</b>	<b>457</b>	<b>75,566</b>	<b>78,622</b>	<b>17,965</b>	<b>2,525</b>	<b>80,273</b>	<b>49,619</b>	<b>44,786</b>
<b>England</b>	<b>167,277</b>	<b>3,530</b>	<b>31,375</b>	<b>44,861</b>	<b>36,204</b>	<b>27,527</b>	<b>23,337</b>	<b>433</b>	<b>72,255</b>	<b>75,395</b>	<b>17,188</b>	<b>2,439</b>	<b>76,145</b>	<b>47,417</b>	<b>43,715</b>
<b>Wales</b>	<b>7,401</b>	<b>196</b>	<b>1,694</b>	<b>2,033</b>	<b>1,466</b>	<b>1,070</b>	<b>918</b>	<b>24</b>	<b>3,311</b>	<b>3,227</b>	<b>777</b>	<b>86</b>	<b>4,128</b>	<b>2,202</b>	<b>1,071</b>
<b>Regional Offices and Health Authorities</b>															
<b>Northern and Yorkshire</b>	<b>16,403</b>	<b>496</b>	<b>3,634</b>	<b>4,585</b>	<b>3,295</b>	<b>2,325</b>	<b>2,032</b>	<b>35</b>	<b>7,202</b>	<b>7,218</b>	<b>1,772</b>	<b>211</b>	<b>12,834</b>	<b>1,170</b>	<b>2,399</b>
Bradford	1,271	32	257	380	267	171	164	-	365	747	138	21	964	49	258
Calderdale and Kirklees	1,572	35	320	398	339	254	221	5	745	621	185	21	419	865	288
County Durham	1,286	47	305	329	235	192	175	3	578	563	128	17	1,140	15	131
East Riding	1,480	51	329	425	310	206	156	3	591	742	124	23	1,280	66	134
Gateshead and South Tyneside	840	31	223	199	166	124	97	-	304	413	110	13	736	5	99
Leeds	2,315	49	467	714	492	333	251	9	885	1,115	280	35	1,776	67	472
Newcastle and North Tyneside	1,494	45	328	453	293	189	184	2	714	563	207	10	1,388	11	95
North Cumbria	739	31	194	194	133	92	95	-	428	252	56	3	708	1	30
Northumberland	704	24	163	196	132	90	98	1	397	248	53	6	664	3	37
North Yorkshire	1,698	46	349	432	316	285	262	8	708	800	163	27	1,224	51	423
Sunderland	860	32	207	251	176	104	90	-	310	405	124	21	775	9	76
Tees	1,414	49	332	427	277	180	148	1	797	475	131	11	1,340	7	67
Wakefield	730	24	160	187	159	105	91	3	380	274	73	3	420	21	289
<b>Trent</b>	<b>13,374</b>	<b>349</b>	<b>2,957</b>	<b>3,640</b>	<b>2,618</b>	<b>2,074</b>	<b>1,703</b>	<b>33</b>	<b>5,775</b>	<b>6,326</b>	<b>1,115</b>	<b>158</b>	<b>10,283</b>	<b>1,271</b>	<b>1,820</b>
Barnsley	528	22	122	138	106	83	56	1	197	263	62	6	394	32	102
Doncaster	884	37	227	223	174	126	96	1	430	369	78	7	97	658	129
Leicestershire	2,679	48	545	780	522	428	347	9	1,202	1,258	193	26	2,071	201	407
Lincolnshire	1,338	34	332	345	233	208	179	7	756	489	75	18	1,187	14	137
North Derbyshire	791	16	170	182	157	151	112	3	463	264	51	13	610	94	87
North Nottinghamshire	869	17	175	245	185	133	111	3	345	450	67	7	732	26	111
Nottingham	1,779	47	385	495	359	266	225	2	563	1,051	144	21	1,389	134	256
Rotherham	676	18	163	173	144	93	84	1	198	391	79	8	540	34	102
Sheffield	1,552	44	304	441	313	246	201	3	598	763	178	13	1,324	20	208
South Derbyshire	1,350	38	279	377	252	218	183	3	436	785	102	27	1,077	54	219
South Humber	928	28	255	241	173	122	109	-	587	243	86	12	862	4	62
<b>Eastern</b>	<b>14,437</b>	<b>297</b>	<b>2,765</b>	<b>3,681</b>	<b>3,047</b>	<b>2,423</b>	<b>2,182</b>	<b>40</b>	<b>6,678</b>	<b>6,437</b>	<b>1,084</b>	<b>238</b>	<b>9,128</b>	<b>2,054</b>	<b>3,255</b>
Bedfordshire	1,849	47	378	513	413	280	216	2	941	714	165	29	1,204	272	373
Cambridgeshire	1,724	36	324	448	400	263	250	3	744	856	108	16	1,435	48	241
East and North Hertfordshire	1,446	26	255	372	307	263	220	2	722	583	118	23	535	508	403
Norfolk	1,716	42	364	442	338	277	246	7	801	742	146	27	1,502	65	149
North Essex	2,378	42	453	537	489	440	411	6	960	1,178	202	38	1,075	521	782
South Essex	2,282	58	438	573	476	390	339	8	1,056	1,019	159	48	1,411	260	611
Suffolk	1,363	27	286	357	272	222	196	3	643	613	79	28	1,215	11	137
West Hertfordshire	1,679	19	267	439	352	288	304	9	811	732	107	29	751	369	559
<b>London</b>	<b>49,471</b>	<b>632</b>	<b>6,702</b>	<b>13,487</b>	<b>12,427</b>	<b>9,004</b>	<b>7,105</b>	<b>109</b>	<b>21,441</b>	<b>21,577</b>	<b>5,642</b>	<b>811</b>	<b>15,829</b>	<b>15,504</b>	<b>18,138</b>
Barking and Havering	1,713	44	330	437	376	271	255	-	722	823	132	36	500	594	619
Barnet	1,622	19	196	455	382	287	280	3	742	734	124	22	747	153	722
Bexley and Greenwich	1,984	33	327	551	446	329	293	5	818	909	225	32	1,003	440	541
Brent and Harrow	3,661	39	445	1,005	893	704	566	9	2,088	1,217	317	39	144	2,658	859
Bromley	1,038	18	161	245	223	186	201	4	471	434	117	16	377	293	368
Camden and Islington	3,245	24	394	929	880	598	413	7	1,574	1,321	308	42	1,395	701	1,149
Croydon	2,028	39	334	481	448	368	353	5	625	1,040	328	35	45	1,379	604
Ealing, Hammersmith and Hounslow	4,680	50	606	1,300	1,200	879	632	13	2,042	1,966	604	68	1,014	1,752	1,914
East London and The City	5,749	83	810	1,699	1,460	971	710	13	1,861	3,064	714	110	3,730	184	1,835
Enfield and Haringey	3,677	46	512	994	898	660	559	8	1,627	1,591	391	68	1,366	963	1,348
Hillingdon	1,247	14	204	347	262	245	175	-	595	509	127	16	273	565	409
Kensington & Chelsea and Westminster	2,933	22	275	825	857	546	401	6	1,646	1,017	240	30	1,423	333	1,177
Kingston and Richmond	1,267	11	183	329	296	221	223	4	627	509	109	22	535	96	636
Lambeth, Southwark and Lewisham	8,095	91	1,081	2,191	2,117	1,527	1,075	13	3,270	3,497	1,150	178	1,593	4,065	2,437
Merton, Sutton and Wandsworth	3,647	54	470	939	1,004	666	504	10	1,671	1,519	395	62	1,407	793	1,447
Redbridge and Waltham Forest	2,885	45	374	760	685	546	465	9	1,062	1,427	361	35	277	535	2,073
<b>South East</b>	<b>24,832</b>	<b>537</b>	<b>4,701</b>	<b>6,289</b>	<b>5,156</b>	<b>4,106</b>	<b>3,966</b>	<b>77</b>	<b>11,622</b>	<b>10,460</b>	<b>2,372</b>	<b>378</b>	<b>7,543</b>	<b>10,080</b>	<b>7,209</b>
Berkshire	2,814	58	470	694	658	481	447	6	1,490	1,010	265	49	710	928	1,176
Buckinghamshire	2,092	40	419	555	408	313	352	5	1,002	822	235	33	434	1,104	554
East Kent	1,566	41	343	441	304	211	220	6	688	649	197	32	267	955	344
East Surrey	1,153	23	209	265	197	223	229	7	563	478	103	9	270	514	369
East Sussex, Brighton and Hove	2,419	54	422	634	560	380	364	5	961	1,245	186	27	431	1,016	972

\* Includes cases with age not stated.

**Table 1  
continued****Legal abortions: Regional Office and health authority of residence by age group,  
gestation weeks and purchaser, 2000**

England and Wales

Place of usual residence	Total*	Age group							Gestation weeks				Purchaser		
		Under 16	16-19	20-24	25-29	30-34	35-44	45 and over	Under 9	9-12	13-19	20+	NHS	NHS contract	Non-NHS
<b>South East continued</b>															
Isle of Wight	239	12	65	40	50	33	38	1	71	134	30	4	114	80	45
Northamptonshire	1,718	52	340	431	344	299	250	2	663	882	155	18	963	258	497
North and Mid Hampshire	1,305	25	260	296	285	231	207	1	666	486	124	29	200	562	543
Oxfordshire	1,735	39	294	465	387	273	272	5	872	696	148	19	1,463	31	241
Portsmouth and South East Hampshire	1,483	41	322	409	273	236	199	3	538	769	158	18	1,251	77	155
Southampton and South West Hampshire	1,400	25	291	409	277	203	193	2	660	602	122	16	338	784	278
West Kent	2,967	65	563	688	610	548	481	12	1,541	1,069	302	55	94	2,178	695
West Surrey	1,994	23	342	493	406	339	381	10	1,158	632	165	39	248	1,164	582
West Sussex	1,947	39	361	469	397	336	333	12	749	986	182	30	760	429	758
<b>South West</b>	<b>11,532</b>	<b>301</b>	<b>2,409</b>	<b>2,991</b>	<b>2,218</b>	<b>1,840</b>	<b>1,733</b>	<b>39</b>	<b>4,369</b>	<b>5,881</b>	<b>1,113</b>	<b>169</b>	<b>7,823</b>	<b>1,357</b>	<b>2,352</b>
Avon	2,682	67	503	754	541	412	394	10	882	1,361	388	51	1,752	278	652
Cornwall and Isles of Scilly	1,029	27	245	263	195	142	154	3	287	662	71	9	873	64	92
Dorset	1,586	42	326	392	325	272	222	7	595	843	127	21	731	228	627
Gloucestershire	1,349	37	283	329	255	216	227	2	535	695	109	10	1,068	65	216
North and East Devon	910	27	183	236	160	152	151	1	410	429	58	13	851	13	46
Somerset	1,017	32	224	249	183	164	164	1	403	476	120	18	810	68	139
South and West Devon	1,436	32	342	396	258	213	186	9	486	815	121	14	1,341	59	36
Wiltshire	1,523	37	303	372	301	269	235	6	771	600	119	33	397	582	544
<b>West Midlands</b>	<b>17,409</b>	<b>456</b>	<b>3,659</b>	<b>4,736</b>	<b>3,419</b>	<b>2,820</b>	<b>2,266</b>	<b>52</b>	<b>7,401</b>	<b>7,565</b>	<b>2,175</b>	<b>268</b>	<b>2,587</b>	<b>10,880</b>	<b>3,942</b>
Birmingham	4,447	91	898	1,323	886	687	550	12	1,766	1,891	709	81	160	3,187	1,100
Coventry	1,557	32	345	477	284	232	184	3	756	619	162	20	12	1,427	118
Dudley	914	31	192	227	185	158	118	3	345	389	160	20	6	616	292
Herefordshire	374	14	81	90	62	71	54	2	223	125	24	2	335	10	29
North Staffordshire	1,107	27	263	306	227	154	126	4	450	519	121	17	113	645	349
Sandwell	1,142	36	232	287	229	208	147	2	460	482	178	22	29	854	259
Shropshire	1,144	39	222	294	224	191	171	3	493	530	104	17	284	621	239
Solihull	544	11	124	147	94	97	68	3	253	220	67	4	65	259	220
South Staffordshire	1,584	48	348	374	302	275	230	7	690	743	128	23	1,017	248	319
Walsall	760	22	160	224	165	108	80	1	175	480	93	12	430	115	215
Warwickshire	1,577	42	322	415	290	256	246	6	803	621	127	26	44	1,345	188
Wolverhampton	876	26	192	235	197	133	90	3	305	398	162	11	33	545	298
Worcestershire	1,383	37	280	337	274	250	202	3	682	548	140	13	59	1,008	316
<b>North West</b>	<b>19,819</b>	<b>462</b>	<b>4,548</b>	<b>5,452</b>	<b>4,024</b>	<b>2,935</b>	<b>2,350</b>	<b>48</b>	<b>7,767</b>	<b>9,931</b>	<b>1,915</b>	<b>206</b>	<b>10,118</b>	<b>5,101</b>	<b>4,600</b>
Bury and Rochdale	1,120	29	249	295	204	196	143	4	484	490	128	18	576	153	391
East Lancashire	1,431	45	340	349	295	210	188	4	689	595	133	14	1,250	22	159
Liverpool	1,764	24	402	544	353	252	187	2	339	1,193	210	22	1,181	229	354
Manchester	2,201	32	436	778	460	284	210	1	1,150	847	187	17	1,193	673	335
Morecambe Bay	664	17	175	172	130	87	83	-	195	413	52	4	538	32	94
North Cheshire	1,014	25	243	277	216	145	107	1	420	470	117	7	22	776	216
North West Lancashire	1,273	41	300	338	242	187	162	3	568	566	125	14	114	702	457
St Helens and Knowsley	976	25	242	255	237	140	77	-	210	642	112	12	628	124	224
Salford and Trafford	1,448	33	273	408	301	231	194	8	638	695	94	21	918	147	383
Sefton	726	11	184	183	147	97	100	4	255	400	67	4	482	62	182
South Cheshire	1,647	39	361	415	325	271	230	6	585	847	194	21	598	688	361
South Lancashire	705	14	158	169	137	134	91	2	260	385	58	2	341	141	223
Stockport	840	12	170	210	196	125	125	2	418	345	72	5	36	524	280
West Pennine	1,419	36	362	363	290	199	164	5	600	687	115	17	593	470	356
Wigan and Bolton	1,586	51	401	403	328	234	165	4	685	759	122	20	1,074	91	421
Wirral	1,005	28	252	293	163	143	124	2	271	597	129	8	574	267	164
<b>Wales</b>	<b>7,401</b>	<b>196</b>	<b>1,694</b>	<b>2,033</b>	<b>1,466</b>	<b>1,070</b>	<b>918</b>	<b>24</b>	<b>3,311</b>	<b>3,227</b>	<b>777</b>	<b>86</b>	<b>4,128</b>	<b>2,202</b>	<b>1,071</b>
North Wales	1,712	43	395	462	333	259	213	7	752	738	200	22	206	1,231	275
Dyfed Powys	983	27	217	265	179	141	148	6	467	427	82	7	879	11	93
Morgannwg	1,290	32	309	359	259	184	147	-	533	586	153	18	1,175	15	100
Bro Taf	1,992	55	444	565	405	274	242	7	905	881	188	18	1,512	35	445
Gwent	1,424	39	329	382	290	212	168	4	654	595	154	21	356	910	158

\* Includes cases with age not stated.

# Report:

## Death registrations 2000: cause, England and Wales

This report gives numbers of deaths **registered** in England and Wales in 2000 by age and sex, and for selected causes of death. It also compares death rates by sex and age with those for deaths which **occurred** in 1998 and 1999.

### Deaths by sex and age of deceased

- 537,877 deaths were registered in 2000, compared with 553,532 registered in 1999, a decline of 2.8 per cent.
- Male deaths fell by 2.5 per cent and female deaths by 3.2 per cent between 1999 and 2000.

Table 1 shows death rates by sex and age, for the years 1998 to 2000, together with percentage changes.

- In 2000 the provisional crude death rates (based on mid-1999 population estimates) were 9.9 per thousand for males, and 10.5 per

thousand for females. These have fallen from the rates of 10.2 for males and 10.9 for females in 1999.

- Between 1999 and 2000 there were considerable percentage falls in most of the age-specific rates for males aged 45 and over and for females aged 60 and over. The largest falls within these age groups were at ages 75–79 (6.4 and 7.3 per cent for males and females respectively). There were also decreases in most age groups under age 15, although these were based on relatively small numbers of deaths.
- The infant mortality rate in 2000 fell to 5.6 deaths per thousand live births, after a slight rise from 5.7 to 5.8 in 1999. This continues the long-term declining trend. (See Table 2.1 in this publication.)

Figures 1 and 2 show the relative change in age-specific death rates for males and females, respectively, between 1990 and 2000.

**Table 1** Death rates per 1,000 population, by sex and age: 1998–2000\* England and Wales

Age group	1998*		1999*		2000†		Percentage change 1998–99		Percentage change 1999–2000	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
<b>All ages</b>	<b>10.3</b>	<b>10.9</b>	<b>10.2</b>	<b>10.9</b>	<b>9.9</b>	<b>10.5</b>	<b>-0.8</b>	<b>0.2</b>	<b>-2.8</b>	<b>-3.6</b>
Under 1**	6.4	5.0	6.5	5.1	6.1	5.1	2.3	1.8	-5.5	-0.6
1-4	0.3	0.2	0.3	0.2	0.3	0.2	-0.6	-1.7	-14.8	-14.3
5-9	0.1	0.1	0.1	0.1	0.1	0.1	-9.0	-4.9	4.1	-4.8
10-14	0.2	0.1	0.2	0.1	0.2	0.1	-7.1	11.8	-4.4	-11.2
15-19	0.5	0.3	0.5	0.2	0.5	0.3	2.6	-5.8	-0.4	4.7
20-24	0.8	0.3	0.8	0.3	0.8	0.3	-1.9	-2.0	4.6	7.2
25-29	0.9	0.4	0.9	0.4	0.9	0.4	-3.4	-2.4	0.4	1.1
30-34	1.0	0.5	1.0	0.5	1.0	0.5	-2.0	-0.9	-0.2	2.7
35-39	1.2	0.8	1.2	0.8	1.3	0.8	-1.5	0.2	5.9	2.4
40-44	1.9	1.3	1.9	1.3	1.9	1.3	-2.9	0.5	1.4	1.3
45-49	3.0	2.0	3.0	2.0	3.0	2.0	-1.3	1.8	-1.0	-2.1
50-54	4.8	3.2	4.8	3.1	4.7	3.2	-0.2	-2.9	-2.5	2.7
55-59	8.6	5.2	8.3	5.1	8.1	5.2	-3.2	-3.3	-2.4	1.6
60-64	14.3	8.5	13.8	8.5	13.5	8.1	-3.5	-0.5	-2.4	-3.9
65-69	24.4	14.5	23.9	14.1	22.5	13.4	-2.0	-3.2	-5.9	-5.0
70-74	41.8	25.5	40.6	24.9	38.5	23.2	-2.8	-2.5	-5.1	-6.9
75-79	66.6	41.4	66.3	41.8	62.1	38.8	-0.5	1.0	-6.4	-7.3
80-84	108.9	72.6	108.1	72.3	108.6	70.9	-0.8	-0.4	0.5	-1.9
85 and over	187.2	151.5	187.9	154.8	187.2	150.3	0.4	2.2	-0.4	-2.9

\* 1998 and 1999 rates are based on death occurrences; 2000 rates on death registrations.

† Provisional rates based on mid-1999 population estimates.

\*\* Deaths per 1,000 live births.

The long-term decline in death rates continued for most sex/age groups. The fall between 1990 and 2000 was most pronounced at ages 1–14, followed by the 45–64 age group. There was relatively little decline in mortality rates at ages 15–44 and 85 and over during the ten-year period. For every age group shown, male death rates declined more than female rates.

## Deaths by underlying cause

Table 2 gives deaths by sex and age for selected underlying causes of death.

In 2000 the main causes of death were cancer, accounting for 25 per cent of all deaths, heart disease, 20 per cent, respiratory diseases, 17 per cent, and cerebrovascular disease, 10 per cent. These proportions varied little from those for the corresponding conditions in 1999.

Within these overall percentages, there are some differences between the figures for males and females. Higher proportions of men than women die of cancer (27 and 23 per cent respectively) and of heart disease (23 and 17 per cent respectively), while more women than men die of cerebrovascular diseases (12 and 8 per cent). However, the proportions dying of respiratory diseases are similar (17 per cent of males and 18 per cent of females).

## EXPLANATORY NOTES

### Coding of underlying cause of death

Since 1993 an automated coding system has been used to assign cause of death. At the same time, we reviewed and clarified some of the internal coding rules and procedures for dealing with particular types of certificate. Information about the changes, and their effect on mortality data, can be found in the annual reference volume on cause of death for 1993 and 1994.<sup>1</sup>

The exception to the automated coding is for deaths due to external causes (ICD9 codes E800-E999). These continue to be coded clerically but additionally using information from coroners' certificates (including inquest verdicts) to produce more reliable figures on suicides, homicides, and other deaths not from natural causes.<sup>1</sup>

Every death from an external cause has some injury or injuries associated with it, and these are included in Table 2 (ICD9 codes 800-999). Where more than one injury is described for a particular death, ONS assigns a single injury code in accordance with WHO guidelines.<sup>2</sup>

ICD-10 was introduced into mortality coding for England and Wales from 1 January 2001. The 2001 Report, which will be published in May 2002, will therefore be based on ICD-10 codes.

## Occurrences and registrations

Up to 1992 ONS (formerly OPCS) publications gave numbers of deaths registered in the data year. Since 1993 most of our published figures represent the number of deaths which occurred in the data year. This change has little effect on annual totals but makes it easier to analyse seasonal variations in mortality. However, we take two annual extracts:<sup>3</sup>

- The first annual extract from our deaths database, produced in April following the data year, comprises registrations in that year. Outputs produced using this extract include this Report and an area-based Report in Population Trends, as well as VS tables and the Public Health Common Data Set.
- The second extract is produced in the September following the year to which it relates, and comprises occurrences in the data year. This extract forms the basis for annual mortality publications, with the exception of the two Reports mentioned above.

## REFERENCES:

- 1 Office for National Statistics. *Mortality statistics: cause 1993 (revised) and 1994*, series DH2 no 21, part 3. The Stationery Office (London: 1996).
- 2 World Health Organisation. *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, volume 1*, p 730. WHO (Geneva:1977).
- 3 Office for National Statistics. *Mortality statistics: cause 1999*, series DH2 no 26, section 2.2. The Stationery Office (London: 2000).

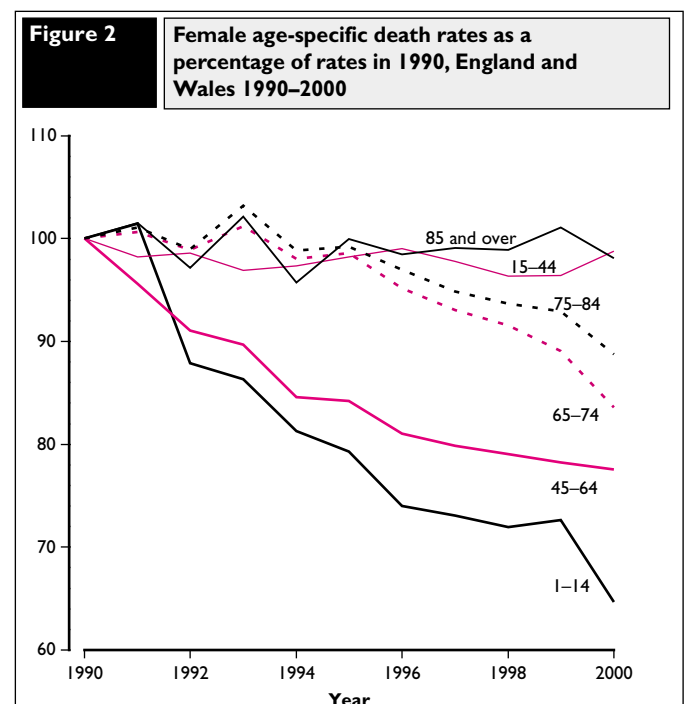
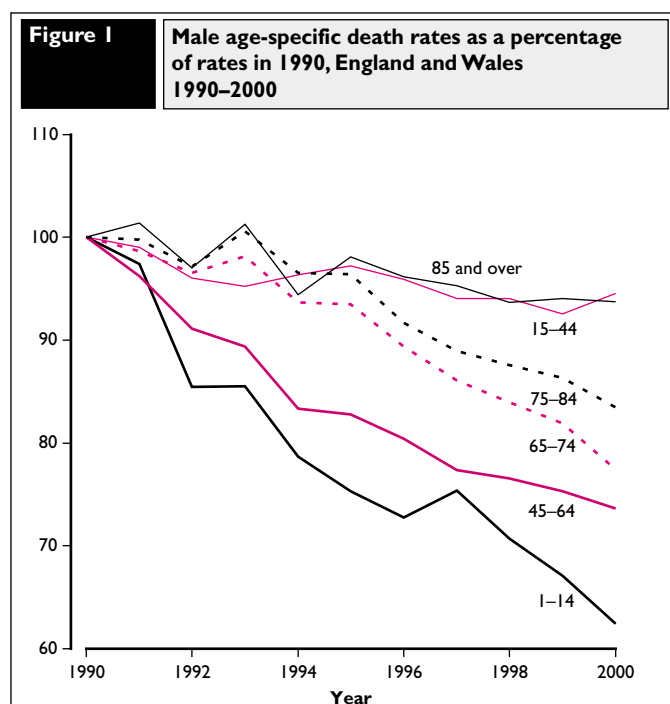


Table 2

## Deaths by age, sex and underlying cause, 2000 registrations

England and Wales

ICD9 code	Causes of death *		All ages	Age group										
				Under 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 and over
	<b>All causes, all ages</b>	<b>M</b>	<b>256,698</b>	<b>1,902</b>	<b>345</b>	<b>490</b>	<b>2,226</b>	<b>3,849</b>	<b>6,135</b>	<b>13,355</b>	<b>28,003</b>	<b>60,801</b>	<b>87,449</b>	<b>52,143</b>
		<b>F</b>	<b>281,179</b>	<b>1,497</b>	<b>257</b>	<b>351</b>	<b>907</b>	<b>1,702</b>	<b>3,853</b>	<b>9,108</b>	<b>17,722</b>	<b>42,318</b>	<b>89,651</b>	<b>113,813</b>
	<b>All causes, ages under 28 days</b>	<b>M</b>	<b>1,299</b>	<b>1,299</b>	-	-	-	-	-	-	-	-	-	-
		<b>F</b>	<b>1,036</b>	<b>1,036</b>	-	-	-	-	-	-	-	-	-	-
	<b>All causes, age 28 days and over</b>	<b>M</b>	<b>255,399</b>	<b>603</b>	<b>345</b>	<b>490</b>	<b>2,226</b>	<b>3,849</b>	<b>6,135</b>	<b>13,355</b>	<b>28,003</b>	<b>60,801</b>	<b>87,449</b>	<b>52,143</b>
		<b>F</b>	<b>280,143</b>	<b>461</b>	<b>257</b>	<b>351</b>	<b>907</b>	<b>1,702</b>	<b>3,853</b>	<b>9,108</b>	<b>17,722</b>	<b>42,318</b>	<b>89,651</b>	<b>113,813</b>
<b>001-139</b>	<b>Infectious and parasitic diseases</b>	<b>M</b>	<b>1,831</b>	<b>58</b>	<b>30</b>	<b>15</b>	<b>42</b>	<b>84</b>	<b>150</b>	<b>176</b>	<b>208</b>	<b>345</b>	<b>449</b>	<b>274</b>
		<b>F</b>	<b>1,948</b>	<b>57</b>	<b>22</b>	<b>20</b>	<b>36</b>	<b>59</b>	<b>77</b>	<b>96</b>	<b>146</b>	<b>288</b>	<b>562</b>	<b>585</b>
001-009	Intestinal infectious diseases	M	178	20	-	-	-	-	-	3	6	21	64	64
		F	370	21	-	1	-	1	2	2	3	29	111	200
010-018	Tuberculosis	M	210	-	-	1	-	5	13	11	32	49	72	27
		F	157	-	1	-	2	8	6	7	14	37	53	29
010-012	Pulmonary and other respiratory tuberculosis	M	169	-	-	-	-	5	7	10	25	39	58	25
		F	108	-	-	-	1	2	3	4	8	30	36	24
033	Whooping cough	M	1	1	-	-	-	-	-	-	-	-	-	-
		F	1	1	-	-	-	-	-	-	-	-	-	-
034-035	Streptococcal sore throat, scarlatina and erysipelas	M	1	-	-	-	-	-	1	-	-	-	-	-
		F	4	-	-	-	1	-	-	-	-	-	1	2
036	Meningococcal infection	M	99	12	17	8	22	9	7	8	11	4	1	-
		F	108	12	12	9	17	8	11	12	9	8	7	3
038	Septicaemia	M	634	15	7	2	8	9	10	34	60	153	210	126
		F	785	12	5	3	2	11	26	33	54	127	277	235
042-044	HIV infection	M	144	1	-	-	2	30	59	31	13	8	-	-
		F	38	-	-	-	-	14	15	3	3	1	2	-
055	Measles	M	-	-	-	-	-	-	-	-	-	-	-	-
		F	1	-	-	-	1	-	-	-	-	-	-	-
084	Malaria	M	7	-	-	-	-	-	1	4	1	1	-	-
		F	11	-	-	1	1	-	2	2	3	2	-	-
137	Late effects of tuberculosis	M	29	-	-	-	-	-	-	1	1	9	16	2
		F	29	-	-	-	-	-	-	1	1	8	15	4
<b>140-239</b>	<b>Neoplasms</b>	<b>M</b>	<b>69,597</b>	<b>3</b>	<b>58</b>	<b>115</b>	<b>184</b>	<b>409</b>	<b>1,094</b>	<b>4,197</b>	<b>10,680</b>	<b>21,278</b>	<b>23,046</b>	<b>8,533</b>
		<b>F</b>	<b>64,943</b>	<b>4</b>	<b>37</b>	<b>83</b>	<b>133</b>	<b>480</b>	<b>1,687</b>	<b>4,859</b>	<b>9,022</b>	<b>16,028</b>	<b>20,333</b>	<b>12,277</b>
<b>140-208</b>	<b>Malignant neoplasms</b>	<b>M</b>	<b>68,638</b>	<b>2</b>	<b>49</b>	<b>108</b>	<b>173</b>	<b>379</b>	<b>1,060</b>	<b>4,135</b>	<b>10,578</b>	<b>21,049</b>	<b>22,726</b>	<b>8,379</b>
		<b>F</b>	<b>63,783</b>	<b>1</b>	<b>32</b>	<b>76</b>	<b>125</b>	<b>464</b>	<b>1,656</b>	<b>4,814</b>	<b>8,936</b>	<b>15,815</b>	<b>19,909</b>	<b>11,955</b>
140-149	Malignant neoplasm of lip, oral cavity and pharynx	M	1,003	-	2	-	2	4	30	171	247	274	196	77
		F	630	-	-	1	2	9	16	55	95	148	152	152
150-159	Malignant neoplasm of digestive organs and peritoneum	M	20,286	-	1	2	14	60	286	1,288	3,400	6,380	6,597	2,258
		F	16,653	-	1	4	13	51	212	749	1,806	3,953	5,795	4,069
150	Malignant neoplasm of oesophagus	M	3,779	-	-	-	-	6	55	321	763	1,141	1,139	354
		F	2,278	-	-	-	-	2	17	89	234	536	845	555
151	Malignant neoplasm of stomach	M	3,583	-	-	-	2	9	44	158	467	1,176	1,235	492
		F	2,162	-	-	-	1	10	33	76	179	498	759	606
153	Malignant neoplasm of colon	M	4,802	-	-	-	7	14	65	252	694	1,524	1,648	598
		F	4,748	-	-	1	2	18	61	207	498	1,089	1,658	1,214
154	Malignant neoplasm of rectum, rectosigmoid junction and anus	M	2,680	-	-	-	-	8	34	163	464	831	870	310
		F	2,000	-	-	-	6	5	35	105	197	397	697	558
157	Malignant neoplasm of pancreas	M	2,990	-	-	-	-	8	42	224	592	917	934	273
		F	3,104	-	-	1	-	1	26	144	414	845	1,082	591

\*The figures for individual cause categories exclude deaths at ages under 28 days.

Table 2  
continued

## Deaths by age, sex and underlying cause, 2000 registrations

England and Wales

ICD9 code	Causes of death *		All ages	Age group										
				Under 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 and over
161	Malignant neoplasm of larynx	M	570	-	-	-	-	1	9	64	118	162	154	62
		F	137	-	-	-	-	-	3	6	19	40	45	24
162	Malignant neoplasm of trachea, bronchus and lung	M	17,940	-	-	-	3	15	137	935	2,982	6,235	6,056	1,577
		F	11,001	-	-	-	-	8	121	658	1,680	3,659	3,667	1,208
172	Malignant melanoma of skin	M	791	-	-	1	9	30	62	124	187	206	135	37
		F	737	1	-	-	3	16	55	114	128	157	156	107
173	Other malignant neoplasm of skin	M	202	-	-	-	1	1	4	7	25	38	72	54
		F	137	-	-	-	-	1	2	4	7	27	35	61
174	Malignant neoplasm of female breast	F	11,380	-	-	-	5	142	625	1,552	1,989	2,300	2,765	2,002
179-189	Malignant neoplasm of genitourinary organs	M	12,970	-	-	1	9	31	64	363	1,146	3,417	5,163	2,776
		F	9,363	-	1	2	10	79	292	806	1,545	2,299	2,787	1,542
179	Malignant neoplasm of uterus, part unspecified	F	457	-	-	-	-	3	7	33	75	109	147	83
180	Malignant neoplasm of cervix uteri	F	1,102	-	-	-	2	46	146	177	175	214	246	96
182	Malignant neoplasm of body of uterus	F	866	-	-	-	-	1	5	40	142	226	306	146
183	Malignant neoplasm of ovary and other uterine adnexa	F	3,901	-	-	1	8	25	91	419	839	1,093	1,005	420
185	Malignant neoplasm of prostate	M	8,271	-	-	-	-	-	3	73	494	2,000	3,603	2,098
186	Malignant neoplasm of testis	M	70	-	-	-	6	14	18	14	7	5	4	2
188	Malignant neoplasm of bladder	M	2,892	-	-	-	1	5	9	80	301	863	1,113	520
		F	1,520	-	-	-	-	1	13	45	102	289	577	493
189	Malignant neoplasm of kidney and other and unspecified urinary organs	M	1,643	-	-	1	1	8	31	190	330	526	416	140
		F	1,074	-	1	1	-	1	24	70	174	277	365	161
191	Malignant neoplasm of brain	M	1,664	1	8	29	27	63	144	275	405	439	236	37
		F	1,176	-	8	18	13	50	91	159	253	293	239	52
200-208	Malignant neoplasm of lymphatic and haematopoietic tissue	M	5,173	1	22	49	63	110	179	403	817	1,512	1,498	519
		F	4,682	-	13	25	39	65	116	285	570	1,116	1,550	903
204-208	Leukaemia	M	1,956	1	21	39	46	47	65	135	263	525	591	223
		F	1,606	-	12	23	20	34	51	106	164	332	496	368
210-239	Benign, in situ, other and unspecified neoplasms	M	959	1	9	7	11	30	34	62	102	229	320	154
		F	1,160	3	5	7	8	16	31	45	86	213	424	322
240-279	Endocrine, nutritional and metabolic diseases and immunity disorders	M	3,324	21	9	13	28	56	109	189	382	847	1,063	607
		F	3,922	8	11	14	40	58	84	124	259	696	1,313	1,315
250	Diabetes mellitus	M	2,690	-	-	-	9	26	66	126	295	718	922	528
		F	3,072	-	-	-	6	22	45	69	196	564	1,102	1,068
260-269	Nutritional deficiencies	M	24	-	-	-	1	1	2	1	1	2	11	5
		F	38	1	-	-	-	-	3	2	2	4	10	16
280-289	Diseases of blood and blood-forming organs	M	842	3	5	3	10	10	13	30	53	162	332	221
		F	951	4	6	5	7	12	15	21	44	127	287	423
280-285	Anaemias	M	186	2	3	1	3	3	8	6	14	23	54	69
		F	365	1	3	5	2	6	4	3	12	38	104	187
290-319	Mental disorders	M	3,702	-	-	1	143	327	266	168	127	334	1,098	1,238
		F	7,069	-	-	1	27	57	58	67	70	297	1,963	4,529
290	Senile and presenile organic psychotic conditions	M	1,916	-	-	-	-	-	-	1	26	183	769	937
		F	5,271	-	-	-	-	-	-	3	25	189	1,432	3,622

\*The figures for individual cause categories exclude deaths at ages under 28 days.

**Table 2  
continued****Deaths by age, sex and underlying cause, 2000 registrations**

England and Wales

ICD9 code	Causes of death *		All ages	Age group										
				Under 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 and over
320-389	Diseases of the nervous system and sense organs	M	4,562	47	51	76	120	154	244	333	468	840	1,408	821
		F	5,076	43	29	56	60	81	137	290	404	726	1,602	1,648
320-322	Meningitis	M	114	10	6	3	4	9	11	18	13	25	11	4
		F	93	5	3	7	6	4	2	8	10	16	17	15
332	Parkinson's disease	M	1,443	-	-	-	-	-	-	6	29	232	772	404
		F	1,203	-	-	-	-	-	1	-	16	108	564	514
340	Multiple sclerosis	M	242	-	-	-	-	9	26	65	68	42	29	3
		F	454	-	-	-	-	6	40	118	116	93	71	10
345	Epilepsy	M	521	2	6	10	31	101	131	95	65	39	28	13
		F	318	3	2	11	29	36	44	58	30	27	39	39
390-459	Diseases of the circulatory system	M	100,085	28	15	25	96	346	1,323	4,542	10,684	25,157	37,344	20,525
		F	107,533	23	29	19	71	184	566	1,621	4,254	14,702	38,560	47,504
390-392	Acute rheumatic fever	M	9	-	-	-	-	1	-	3	-	4	1	-
		F	17	-	-	-	-	-	2	2	1	3	5	4
393-398	Chronic rheumatic heart disease	M	403	-	1	-	1	6	8	20	51	109	155	52
		F	1,157	1	-	-	1	2	13	25	89	263	435	328
401-405	Hypertensive disease	M	1,429	-	-	2	-	5	39	78	214	354	501	236
		F	1,779	-	-	-	1	3	13	31	90	260	617	764
410-414	Ischaemic heart disease	M	60,186	-	1	-	9	97	744	3,105	7,590	16,462	21,772	10,406
		F	48,540	-	1	1	2	22	179	654	2,192	7,811	18,574	19,104
410	Acute myocardial infarction	M	28,620	-	1	-	5	52	381	1,491	3,764	8,100	10,404	4,422
		F	22,405	-	-	-	1	15	99	313	1,145	4,019	8,971	7,842
415-429	Diseases of pulmonary circulation and other forms of heart disease	M	9,971	15	8	12	60	119	223	499	881	1,930	3,471	2,753
		F	15,247	16	24	9	40	72	134	289	591	1,740	4,700	7,632
430-438	Cerebrovascular disease	M	19,532	11	4	9	20	81	239	607	1,262	3,910	7,969	5,420
		F	32,966	3	4	8	20	58	178	517	986	3,439	11,171	16,582
433-434	Cerebral infarction	M	1,856	1	1	1	1	9	28	86	139	444	734	412
		F	2,600	-	1	1	1	7	15	47	77	306	902	1,243
440	Atherosclerosis	M	416	-	-	-	-	-	-	3	14	81	159	159
		F	722	-	-	-	-	-	-	1	8	38	195	480
451-453	Phlebitis, thrombophlebitis, venous embolism and thrombosis	M	684	1	-	-	1	10	20	61	87	200	208	96
		F	1,171	1	-	1	3	13	22	40	79	234	437	341
460-519	Diseases of the respiratory system	M	42,573	67	38	25	71	125	288	891	2,604	7,930	16,705	13,829
		F	51,409	37	17	31	53	95	215	619	1,747	5,983	16,257	26,355
480-486	Pneumonia	M	23,229	24	18	7	33	70	188	487	1,022	3,238	8,746	9,396
		F	33,966	17	9	14	24	55	127	293	691	2,416	9,786	20,534
487	Influenza	M	192	-	3	-	1	3	2	5	13	26	77	62
		F	357	-	-	-	2	1	2	5	4	22	110	211
490-496	Chronic obstructive pulmonary disease and allied conditions	M	14,348	-	6	10	24	31	60	281	1,209	3,711	6,105	2,911
		F	11,685	-	-	9	15	27	55	226	851	2,993	4,785	2,724
490-491	Bronchitis, chronic and unspecified	M	945	-	2	-	1	5	5	28	100	244	372	188
		F	571	-	-	-	3	-	6	14	45	139	196	168
493	Asthma	M	478	-	3	10	22	20	32	61	66	98	114	52
		F	803	-	-	9	12	22	32	72	94	172	221	169
496	Chronic airways obstruction, not elsewhere classified	M	11,482	-	1	-	-	2	13	142	867	2,960	5,050	2,447
		F	9,366	-	-	-	-	2	10	103	589	2,437	4,002	2,223
520-579	Diseases of the digestive system	M	9,885	11	13	10	21	124	596	1,231	1,433	2,104	2,745	1,597
		F	12,230	4	11	6	23	103	327	662	928	1,902	3,925	4,339

\*The figures for individual cause categories exclude deaths at ages under 28 days.

**Table 2  
continued****Deaths by age, sex and underlying cause, 2000 registrations**

England and Wales

ICD9 code	Causes of death *	Sex	All ages	Age group										
				Under 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 and over
531-533	Ulcer of stomach and duodenum	M	1,841	-	-	-	-	4	32	88	175	441	736	365
		F	2,160	-	-	2	1	6	19	32	99	345	797	859
540-543	Appendicitis	M	67	1	1	1	3	2	4	3	6	17	17	12
		F	72	-	1	-	1	-	1	1	2	17	21	28
550-553	Hernia of abdominal cavity	M	282	3	-	1	1	2	4	5	19	45	106	96
		F	444	-	-	-	-	1	2	11	26	60	175	169
562	Diverticula of intestine	M	442	-	-	-	-	1	2	14	32	130	161	102
		F	1,387	-	-	-	-	2	2	15	49	191	555	573
571	Chronic liver disease and cirrhosis	M	2,902	-	-	1	1	72	427	862	776	494	227	42
		F	1,837	-	1	-	4	62	246	434	397	396	242	55
<b>580-629</b>	<b>Diseases of the genitourinary system</b>	<b>M</b>	<b>3,170</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>13</b>	<b>31</b>	<b>66</b>	<b>161</b>	<b>479</b>	<b>1,201</b>	<b>1,209</b>
		<b>F</b>	<b>4,112</b>	<b>4</b>	<b>-</b>	<b>4</b>	<b>3</b>	<b>27</b>	<b>33</b>	<b>81</b>	<b>144</b>	<b>452</b>	<b>1,318</b>	<b>2,046</b>
580-589	Nephritis, nephrotic syndrome and nephrosis	M	1,434	3	-	-	2	4	18	32	80	254	549	492
		F	1,472	4	-	3	3	10	10	23	72	179	461	707
585	Chronic renal failure	M	501	-	-	-	1	2	6	11	22	93	182	184
		F	503	-	-	1	1	3	5	10	22	59	162	240
600	Hyperplasia of prostate	M	189	-	-	-	-	-	-	-	6	19	84	80
<b>630-676</b>	<b>Complications of pregnancy, childbirth and the puerperium</b>	<b>F</b>	<b>37</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>22</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
630-639	Pregnancy with abortive outcome	F	8	-	-	-	2	4	2	-	-	-	-	-
640-646, 651-676	Direct obstetric causes	F	26	-	-	-	1	15	10	-	-	-	-	-
647-648	Indirect obstetric causes	F	3	-	-	-	-	3	-	-	-	-	-	-
<b>680-709</b>	<b>Diseases of the skin and subcutaneous tissue</b>	<b>M</b>	<b>380</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5</b>	<b>4</b>	<b>10</b>	<b>28</b>	<b>78</b>	<b>127</b>	<b>128</b>
		<b>F</b>	<b>874</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>5</b>	<b>11</b>	<b>8</b>	<b>28</b>	<b>78</b>	<b>298</b>	<b>445</b>
<b>710-739</b>	<b>Diseases of the musculoskeletal system and connective tissue</b>	<b>M</b>	<b>897</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>4</b>	<b>9</b>	<b>21</b>	<b>29</b>	<b>58</b>	<b>195</b>	<b>287</b>	<b>292</b>
		<b>F</b>	<b>2,512</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>6</b>	<b>17</b>	<b>37</b>	<b>45</b>	<b>115</b>	<b>291</b>	<b>814</b>	<b>1,184</b>
714.0	Rheumatoid arthritis	M	142	-	-	-	-	-	1	3	15	56	50	17
		F	509	-	-	-	-	-	3	12	32	110	231	121
<b>740-759</b>	<b>Congenital anomalies</b>	<b>M</b>	<b>581</b>	<b>115</b>	<b>48</b>	<b>32</b>	<b>43</b>	<b>56</b>	<b>46</b>	<b>53</b>	<b>55</b>	<b>45</b>	<b>60</b>	<b>28</b>
		<b>F</b>	<b>587</b>	<b>115</b>	<b>41</b>	<b>25</b>	<b>36</b>	<b>42</b>	<b>44</b>	<b>50</b>	<b>60</b>	<b>62</b>	<b>68</b>	<b>44</b>
745-747	Anomalies of the heart and circulatory system	M	313	62	20	17	27	33	28	35	34	22	29	6
		F	306	61	19	13	16	28	24	22	26	40	42	15
<b>760-779</b>	<b>Certain conditions originating in the perinatal period</b>	<b>M</b>	<b>51</b>	<b>50</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
		<b>F</b>	<b>36</b>	<b>32</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
764-765	Slow fetal growth, fetal malnutrition and fetal immaturity	M	5	5	-	-	-	-	-	-	-	-	-	-
		F	3	3	-	-	-	-	-	-	-	-	-	-
768-770	Hypoxia, birth asphyxia and other respiratory conditions	M	32	32	-	-	-	-	-	-	-	-	-	-
		F	22	19	3	-	-	-	-	-	-	-	-	-
<b>780-799</b>	<b>Symptoms, signs and ill-defined conditions</b>	<b>M</b>	<b>3,074</b>	<b>161</b>	<b>11</b>	<b>6</b>	<b>36</b>	<b>69</b>	<b>98</b>	<b>93</b>	<b>91</b>	<b>100</b>	<b>443</b>	<b>1,966</b>
		<b>F</b>	<b>10,608</b>	<b>93</b>	<b>5</b>	<b>2</b>	<b>12</b>	<b>17</b>	<b>39</b>	<b>31</b>	<b>40</b>	<b>87</b>	<b>1,101</b>	<b>9,181</b>
797	Senility without mention of psychosis	M	2,334	-	-	-	-	-	-	-	-	14	394	1,926
		F	10,139	-	-	-	-	-	-	-	-	30	1,030	9,079
798.0	Sudden infant death syndrome	M	117	115	2	-	-	-	-	-	-	-	-	-
		F	61	61	-	-	-	-	-	-	-	-	-	-

\* The figures for individual cause categories exclude deaths at ages under 28 days.

**Table 2**  
continued**Deaths by age, sex and underlying cause, 2000 registrations**

England and Wales

ICD9 code	Causes of death *		All ages	Age group										
				Under 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 and over
<b>800-999</b>	<b>Injury and poisoning</b>	<b>M</b>	<b>10,845</b>	<b>35</b>	<b>66</b>	<b>166</b>	<b>1,423</b>	<b>2,062</b>	<b>1,852</b>	<b>1,347</b>	<b>971</b>	<b>907</b>	<b>1,141</b>	<b>875</b>
		<b>F</b>	<b>6,296</b>	<b>37</b>	<b>46</b>	<b>82</b>	<b>396</b>	<b>442</b>	<b>511</b>	<b>534</b>	<b>461</b>	<b>599</b>	<b>1,250</b>	<b>1,938</b>
800-829	Fractures	M	1,568	-	4	20	125	94	119	92	94	164	367	489
		F	2,221	2	5	11	41	20	19	37	43	154	564	1,325
850-869	Intracranial injury (excluding skull fracture) and internal injuries of chest, abdomen and pelvis	M	3,425	15	23	82	607	617	520	391	331	292	370	177
		F	1,449	13	15	42	152	123	119	139	125	163	301	257
940-949	Burns	M	154	-	4	3	15	20	23	20	19	15	21	14
		F	117	1	2	-	4	11	12	17	6	8	21	35
950-957	Injury to nerves and spinal cord	M	55	-	-	2	2	3	4	10	5	12	11	6
		F	25	-	-	-	4	1	1	3	2	5	5	4
960-989	Poisoning and toxic effects	M	2,135	1	11	17	234	575	543	360	168	115	81	30
		F	1,056	1	10	9	88	167	210	177	129	106	101	58
994.1	Drowning and non-fatal submersion	M	340	3	9	13	41	45	59	51	37	38	29	15
		F	156	3	4	3	15	9	24	26	30	20	15	7
<b>E800-E999</b>	<b>External causes of injury and poisoning</b>	<b>M</b>	<b>10,845</b>	<b>35</b>	<b>66</b>	<b>166</b>	<b>1,423</b>	<b>2,062</b>	<b>1,852</b>	<b>1,347</b>	<b>971</b>	<b>907</b>	<b>1,141</b>	<b>875</b>
		<b>F</b>	<b>6,296</b>	<b>37</b>	<b>46</b>	<b>82</b>	<b>396</b>	<b>442</b>	<b>511</b>	<b>534</b>	<b>461</b>	<b>599</b>	<b>1,250</b>	<b>1,938</b>
E800-E949	Accidents and adverse effects	M	6,506	15	52	142	870	1,018	880	621	545	627	945	791
		F	4,749	19	39	68	228	179	231	262	277	447	1,131	1,868
E800-E848	Transport accidents	M	2,514	2	15	88	611	564	394	238	180	161	183	78
		F	902	2	13	48	166	98	89	86	66	110	153	71
E810-E819	Motor vehicle traffic accidents	M	2,331	2	11	83	578	528	356	212	163	150	171	77
		F	867	2	13	43	159	95	82	82	63	109	148	71
E850-E869	Accidental poisoning	M	771	-	4	2	123	262	216	102	31	18	11	2
		F	298	1	1	3	37	50	77	49	39	21	12	8
E880-E888	Accidental falls	M	1,769	-	4	6	37	47	114	116	165	251	473	556
		F	2,528	2	3	2	9	9	21	62	76	193	677	1,474
E890-E899	Accidents caused by fire and flames	M	216	-	6	12	13	29	29	24	20	32	33	18
		F	166	-	8	4	2	8	11	19	15	13	49	37
E900-E929	Other accidents including late effects	M	1,049	13	23	30	83	110	120	132	135	119	175	109
		F	648	14	14	10	13	9	26	35	48	69	170	240
E900-E909	Accidents due to natural and environmental factors	M	87	-	-	-	1	2	5	11	9	14	22	23
		F	97	-	-	-	1	1	1	1	3	15	33	42
E910-E929	Accidents caused by submersion, suffocation and foreign bodies, other accidents and late effects of accidental injury	M	962	13	23	30	82	108	115	121	126	105	153	86
		F	551	14	14	10	12	8	25	34	45	54	137	198
E950-E959	Suicide and self inflicted injury	M	2,740	-	-	1	291	643	619	485	296	209	137	59
		F	843	-	-	-	84	141	154	155	112	90	73	34
E960-E969	Homicide and injury purposely inflicted by other persons	M	203	7	7	9	43	47	44	22	15	6	1	2
		F	113	7	2	8	15	19	25	12	6	6	7	6
E980-E989	Injury undetermined whether accidentally or purposely inflicted	M	1,390	13	7	14	218	351	309	218	114	65	58	23
		F	591	11	5	6	69	103	101	105	66	56	39	30
E950-E959, E980-E989 less E988.8	Suicides and injury undetermined whether accidentally or purposely inflicted	M	3,786	3	2	11	431	905	855	662	387	267	184	79
		F	1,303	1	-	3	124	219	236	249	171	139	103	58

\*The figures for individual cause categories exclude deaths at ages under 28 days.

## Other population and health articles, publications and data

### *Population Trends 104*

Publication 28 June 2001

- Planned articles:**
- The demographic situation in the European Union
  - Teenage births to ethnic minority women
  - Adoptees and relatives who wish to contact one another: the adoption contact register
  - The proportion of adoptees who have received their birth records in England and Wales

- Reports:**
- Live births in England and Wales 2000: local and health authority areas
  - Death registrations 2000: area, England and Wales

### *Health Statistics Quarterly 11*

Publication 23 August 2001

- Planned articles:**
- Prevalence and management of heart failure in general practice in England and Wales, 1994–98
  - Does living alone increase mortality risk in men?
  - Psychiatric consultations rates among 16- to 64-year-olds
  - Geographical variations in deaths related to drug poisoning in England and Wales, 1993–99

- Report:**
- Sudden infant deaths 2000

### **Forthcoming Annual Reference Volumes**

Title	Planned publication
Cancer statistics registrations, 1995–97, MBI no.28	May 2001
Mortality statistics: Injury and poisoning, 1999, DH4 no.24	June 2001
Marriage, divorce and adoption statistics, 1999, FM2 no.27	July 2001

### **Vital Statistics data – annual data for each Health and Local Authority in England and Wales**

#### **VS1 Births and deaths summary data:**

Population, births and deaths, fertility and mortality rates, comparisons with the region, and with England and Wales.

#### **VS2 Births:**

Births by age of mother, number of previous children, place of confinement and birthweight.

#### **VS3 Deaths by cause:**

Deaths by cause, sex and age.

#### **VS4 Vital Statistics for wards:**

Live births, stillbirths and deaths (by age).

#### **VS4D Deaths for wards:**

Deaths for wards in local authorities by 12 selected causes.

#### **VS5 Infant mortality:**

Live births, stillbirths and infant deaths. Numbers and rates. Live births and stillbirths by birthweight. Stillbirths by gestation period.

#### **How to order:**

Most Vital Statistics data are available on paper, disk and CD-ROM for each year 1993–99. Prices range from £30 to £40. To order contact:

Vital Statistics Outputs Branch  
Room 1300  
Office for National Statistics  
Segensworth Road  
Titchfield  
Hampshire PO15 5RR  
Tel: 01329 813758