

Statistical bulletin

Births in England and Wales: 2012

Live births, stillbirths and the intensity of childbearing, measured by the total fertility rate.



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1. Key findings

- There were 729,674 live births in England and Wales in 2012, increasing slightly (by 0.8%) from 723,913 in 2011
- In 2012, the Total Fertility Rate (TFR) increased slightly to 1.94 children per woman from 1.93 in 2011
- The number of stillbirths fell to 3,558 in 2012 from 3,811 in 2011 (a fall of 6.6%)
- In 2012 the stillbirth rate fell to 4.9 per thousand total births from 5.2 in 2011
- The average age of mothers in 2012 increased to 29.8 years, compared with 29.7 years in 2011

2. Summary

This bulletin presents summary statistics on live births and stillbirths in England and Wales in 2012. Birth statistics reported include counts of live births and stillbirths, fertility rates by age of mother and by area of usual residence, and the percentage of births to mothers born outside the UK.

This is the first time that 2012 annual figures for births in England and Wales have been published by the Office for National Statistics (ONS).

Fertility rates and average age of mother have been calculated for 2011 and 2012 using mid-year population estimates based on the 2011 Census. For 2002–2010, they have been recalculated using revised mid-year population estimates which take account of the 2011 Census so may differ from previously published rates.

3. Live births (numbers and rates)

There were 729,674 live births in England and Wales in 2012, compared with 723,913 in 2011 (a rise of 0.8%). The number of live births and the total fertility rate (TFR) fluctuated throughout the twentieth century with a sharp peak at the end of World War II (Figure 1). Live births peaked at near post-war levels again in 1964 (875,972 births), but since then lower numbers have been recorded. The lowest annual number of births in the twentieth century was 569,259 in 1977.

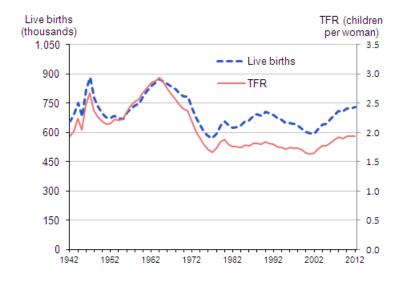
The small rise in live births in 2012 represents a continuation of the increasing numbers recorded since a low in 2001. During this period the number of live births has risen by 23% from 594,634 in 2001, despite a small fall between 2008 and 2009. The number of live births in 2012 reached the highest level since 1971 when there were 783,155 live births. The number of births is dependent on both fertility rates and the size and age structure of the female population.

Fertility rates for England and Wales (see background note 3) increased slightly for 2012 to an average of 1.94 children per woman from 1.93 in 2011.

During the 1990s, the TFR fell from 1.80 in 1992 to a record low of 1.63 by 2001. This was largely due to women delaying childbearing to older ages (Jefferies, 2008 (297 Kb Pdf); Tromans, et al., 2008 (3.33 Mb Pdf) Between 2002 and 2008 the fertility rate rose steadily to 1.92, before falling slightly in 2009 to 1.90. Since 2010 the fertility rate has been stable, reaching 1.94 children per women in 2010 and 2012 and 1.93 in 2011.

Figure 1: Number of live births and Total Fertility Rate (TFR), 1942–2012

England and Wales



Source: Office for National Statistics

Notes:

- 1. Based on births occurring in the calendar year.
- 2. TFRs for 2002–2010 have been recalculated using revised mid-year population estimates which take account of the 2011 Census and therefore may differ from previously published figures.
- The TFRs for 2011 and 2012 are calculated using mid-year population estimates based on the 2011 Census.

Changes in the TFR can result from changes in the timing of childbearing within women's lives as well as any changes in completed family size. There is no single explanation underlying the overall increases in fertility since 2001 which are likely to have resulted from a combination of factors (Jefferies, 2008 (297 Kb Pdf; RAND, 2012). Possible causes may include:

- more women currently in their twenties having children
- more women who had previously postponed are having children at older ages
- increases in the numbers of foreign born-women who tend to have higher fertility than UK-born women (Tromans, et al., 2009 (2.08 Mb Pdf), and
- government policy and the economic climate indirectly influencing individuals' decisions around childbearing

The first three factors listed above are likely to have continued to put upward pressure on the TFR since 2008. However, the combined effect of multiple government policies and the changing economic climate does not have a clear impact on fertility in a particular direction (Sobotka et al., 2010; RAND, 2012). Why has the fertility rate risen over the last decade in England and Wales? provides more information on how these factors have influenced the fertility rate.

4. Stillbirths

The number of stillbirths in England and Wales decreased to 3,558 in 2012 from 3,811 in 2011 (a fall of 6.6%) even though the total number of births (both live births and stillbirths) increased in 2012. Stillbirths in England decreased by 7.2% while stillbirths in Wales increased by 8.4%.

The stillbirth rate takes into account the total number of births and therefore provides a more accurate indication of trends. In 2012 the stillbirth rate for England and Wales fell to 4.9 per thousand total births from 5.2 in 2011. This is the lowest stillbirth rate since 1992 when it was 4.3. In England the stillbirth rate in 2012 was 4.8 per thousand total births down from 5.2 in 2011. In Wales the stillbirth rate in 2012 was 5.1 per thousand total births up from 4.7 in 2011.

Small fluctuations in the number of stillbirths and the stillbirth rate in England and Wales have occurred during the last decade (the highest stillbirth rate during the period was 5.8 per thousand live and stillbirths in 2003). Key risk factors for stillbirths are overweight mothers, smoking during pregnancy and multiple pregnancies. (<u>SANDS, 2012</u>).

The number of stillbirths is an indicator within the NHS outcomes framework 2012/13 for reducing deaths in babies and children in England. Department of Health and SANDS have developed a stillbirth prevention programme as a result of a workshop on stillbirth prevention in March 2012 which brought together a select group of key experts and professional bodies.

In Wales, a National Stillbirth Working Group was set up within the 1000 Lives programme of work in April 2012 and includes representation of key stakeholders in maternity care. The National Assembly for Wales published a report in 2013 which identified a number of actions to improve the stillbirth rate in Wales.

5. Live births by age of mother

Since 2001 when the total fertility rate was at a record low, fertility levels have risen for women in all age groups with the exception of those aged under 20. The largest percentage increase in fertility rates was for women aged 40 and over followed by women aged 35–39 with increases of 66% and 53% respectively. This continues the trend of rising fertility among women aged 35 and over recorded during the 1980s and 1990s. The number of live births to mothers aged 40 and over has more than quadrupled over the last three decades from 6,519 in 1982 to 29,994 in 2012.

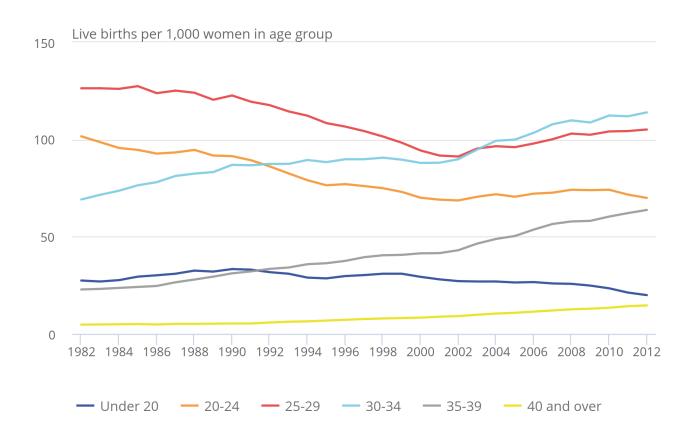
Fertility rates for women aged 20–24, 25–29 and 30–34 have increased by 1%, 15% and 29% respectively since 2001 (Figure 2). In contrast fertility rates among women aged under 20 fell by 29% over the same period.

Figure 2: Age-specific fertility rates, 1982–2012

England and Wales

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England and Wales



Source: Office for National Statistics

Notes:

- 1. Based on births occurring in the calendar year.
- 2. ASFRs for 2002–2010 have been calculated using revised mid-year population estimates which take account of the 2011 Census and therefore may differ from previously published figures.
- 3. The ASFRs for 2011 and 2012 are calculated using mid-year estimates based on the 2011 Census.

Between 2011 and 2012 there were decreases in fertility rates for women aged under 20 and 20–24; and increases for those aged 25–29, 30–34, 35–39 and 40 and over. The largest percentage decrease was recorded for women under the age of 20 with fertility falling by 6.1%. Fertility rates for women aged 20–24 fell by a smaller amount (2.4%). The largest percentage increases were for women aged 35–39 and 40 and over with fertility rising by 2.6% and 2.8% respectively. Fertility rates for women aged 25–29 and 30–34 rose by smaller amounts (0.8% and 1.8% respectively).

These changes in age-specific fertility rates have resulted in the average age of mothers rising to 29.8 years in 2012, compared with 29.7 years in 2011 (see background note 6). The rise in 2012 represents a continuation of the increasing age of mother recorded since 1976. These trends reflect the increasing numbers of women delaying childbearing to later ages. This may be due to a number of factors such as increased participation in higher education, increased female participation in the labour force, the increasing importance of a career, the rising opportunity costs of childbearing, labour market uncertainty, housing factors and instability of partnerships (Ní Bhrolcháin, et al., 2012).

The number of births in a given year is dependent on the number of women in the key childbearing ages (15–44 years) and on fertility rates in that year. Compared with 2011, the number of live births in 2012 decreased for women aged under 20, 20–24 and 35–39. For women aged 25–34 and 40 and over, the number of live births increased.

- For women aged 40 and over, the rise in births was driven solely by a rise in fertility, as the estimated female population in England and Wales aged 40–44 decreased between mid-2011 and mid-2012
- The decrease in births to women aged under 20 in 2012 was caused by falling fertility at this age, alongside an estimated decrease in the number of women aged 15–19 between mid-2011 and mid-2012
- The rise in births to women aged 25–29 and 30–34 was caused by an increase in fertility and an increase in the estimated female population in England and Wales at these ages
- For women aged 35–39 the decrease in the number of births was due to a decrease in the estimated female population in England and Wales at this age, since fertility levels increased
- The decrease in births for women aged 20–24 was due to a decrease in fertility since the estimated female population in this age group increased

6. Live births within marriage/civil partnership

In 2012 nearly half of all babies were born outside marriage/civil partnership (47.5%), compared with 47.2% in 2011 and 40.6% in 2002. This continues the long-term rise in the percentage of births outside marriage/civil partnership, which is consistent with increases in the number of couples cohabiting rather than married or in a civil partnership (for further information, see <u>Families and Households</u> on the ONS website).

7. Live births to mothers born outside the UK

The percentage of live births in England and Wales to mothers born outside the UK continued to rise in 2012, reaching 25.9% compared with 25.5% in 2011 and 17.7% in 2002. The proportion of births to mothers born outside the UK has increased every year since 1990 when it was 11.6%. Recent rises in the number of births to non-UK born women can be mainly attributed to the increase in the population of women born outside the UK (ONS, 2012).

The proportion of births to women born outside the UK is higher than the proportion of the female population of childbearing age born outside the UK (<u>ONS, 2012</u>). There are two reasons for this: firstly fertility levels are on average higher among foreign-born women and secondly the foreign-born and UK-born female populations of reproductive age have different age structures (for example a higher proportion of foreign-born women are aged from 25 to 34, the ages where fertility is highest).

More detailed ONS birth statistics for 2012 by <u>parents' country of birth</u> will be published in August/September 2013.

A report on <u>Childbearing of UK and non-UK born women living in the UK - 2011</u> was published by ONS on 25 October 2012. This looks at fertility patterns in the UK for UK born and non-UK born mothers in the period 2007–2011. The report includes investigation of fertility patterns at the country level, and also of specific non-UK maternal countries of birth.

8. Live births by area of usual residence

In 2012 the West Midlands had the highest TFR among the regions of England with 2.04 children per woman. The North East had the lowest TFR (1.83 children per woman).

Among the local authorities in England in 2012, Camden had the lowest TFR with 1.35 children per woman, while Barking and Dagenham had the highest (2.58 children per woman).

In Wales in 2012, Cardiff had the lowest TFR with 1.71 children per woman while the Isle of Anglesey had the highest (2.29 children per woman). The TFRs for the Isle of Anglesey are based on small numbers of women so should be interpreted with some caution.

Fertility levels vary by local area for several reasons including differences in the timing of childbearing and differing ideals on family size. These can be influenced by the population characteristics of the area such as levels of educational attainment, ethnicity/country of birth, and deprivation levels (<u>Tromans, et al., 2008 (3.33 Mb Pdf</u>).

9. Births in the UK

The provisional number of live births in the UK in 2012 was 812,970. This is a rise of 0.6% compared with 2011 when there were 807,776 births.

In Scotland the number of live births decreased, from 58,590 in 2011 to 58,027 in 2012 (provisional figure), a fall of 1.0%. Northern Ireland also recorded a slight fall in the number of live births, decreasing by less than 0.1% to 25,269 in 2012 (provisional figure), from 25,273 in 2011.

10 . Planned changes to birth outputs

During May 2012 changes were made to the Population Statistics Act, which means that information on the number of previous children and whether previously married is now collected from all mothers at birth registration and not just from married women. This will have an impact on a number of tables and proposals for changes (66.2 Kb Pdf) to outputs for 2012 and 2013 data were outlined on the ONS website in July 2012. Feedback from users was invited. No feedback was received and so the outlined changes will be implemented.

Changes to the tables included within <u>Live Births by socio-economic status of father</u> are also being considered including the possible implementation of <u>the combined method for deriving the National Statistics Socio-economic classification</u> (using the higher NS-SEC of both parents rather than the NS-SEC of the father). <u>A proposal for changes to outputs for 2012 data (63.5 Kb Pdf)</u> is available on the ONS website.

11. Users and uses of birth statistics

The Office for National Statistics uses births data to:

- produce population estimates and population projections at both national and subnational level
- · quality assure census estimates, and
- report on social and demographic trends

The Department of Health (DH) is a key user of birth statistics. Data are used, for example, to plan maternity services, inform policy decisions and monitor child mortality. The <u>Public Health Outcomes Framework</u> sets out the desired outcomes for public health and how these will be measured, this includes indicators related to births. Similar indicators are also included within the <u>NHS Outcomes Framework</u>.

Other key users of the data are local authorities and other government departments for planning and resource allocation. For example, local authorities use birth statistics to decide how many school places will be needed in a given area. The Department for Work and Pensions (DWP) uses detailed birth statistics to feed into statistical models they use for pensions and benefits.

Other users include academics, demographers and health researchers who conduct research into trends and characteristics. Lobby groups use birth statistics to support their cause, for example, campaigns against school closures and midwife shortages. Special interest groups, such as Birth Choice UK, make the data available to enable comparisons between maternity units to help women choose where they might like to give birth. Retailers use births data to inform future demand. Organisations such as Eurostat and the United Nations (UN) use birth statistics for making international comparisons. The media also report on key trends and statistics.

12. Further information

More data on births in England and Wales in 2012 (283 Kb Excel sheet) are available on the ONS website.

Data on deaths in England and Wales in 2012 are available on the ONS website.

A <u>Quality and Methodology Information (275.2 Kb Pdf)</u> document for birth statistics is available on the ONS website. Further information on data quality, legislation and procedures relating to births is available in <u>births metadata (439.7 Kb Pdf)</u>.

Further 2012 births statistics will be published later in 2013, see the Publication Hub for more details on releases.

An <u>Interactive mapping tool</u>, which enables trends in fertility to be analysed at the local level is available on the Neighbourhood Statistics website. The tool will be updated in Autumn 2013 to include 2011 and 2012 rates and revised rates for 2002–2010 using the revised population estimates which take account of the 2011 Census.

For births data for other UK countries please see the <u>latest birth statistics for Northern Ireland</u> and the <u>latest birth</u> statistics for Scotland.

International comparisons of live birth numbers and rates are available in the <u>Vital Statistics: Population and Health Reference Tables</u>.

13. References

Department for Health (2013), Public Health Outcomes Framework.

Department for Health (2012), NHS Outcomes Framework.

Jefferies J (2008), <u>Fertility Assumptions for the 2006-based national population projections (297 Kb Pdf)</u>, Population Trends 131 pp 19–27, spring 2008.

National Assembly for Wales (2013), One-day inquiry into stillbirths in Wales.

Ni Bhrolcháin M and Beaujouan E (2012), <u>Fertility postponement is largely due to rising educational enrolment</u>, Population Studies: A Journal of Demography.

ONS (2012), Childbearing of UK and non-UK born women living in the UK.

RAND Corporation (RAND) (2012), <u>Europe's demography: Are babies back? The recent recovery in EU period fertility due to older childbearing</u>.

Sobotka, T., Skirbekk, V., and Philipov, D. (2010), <u>Economic recession and fertility in the developed world: a literature review</u>, Vienna Institute of Demography. Research note produced for the European Commission.

Stillbirth and Neonatal Death charity (SANDS), UK stillbirth and neonatal death charity, <u>Causes and risk factors</u> <u>for stillbirths</u> [accessed 3 July 2013].

Tromans N, Natamba E, Jefferies J and Norman P (2008), <u>Have national trends in fertility between 1986 and 2006 occurred evenly across England and Wales?</u> (3.33 Mb Pdf), Population Trends 133, pp 7–19, autumn 2008.

Tromans N, Natamba E and Jefferies J (2009), <u>Have women born outside the UK driven the rise in UK births</u> since 2001? (2.08 Mb Pdf), Population Trends 136, pp 28–42, summer 2009.

14. Background notes

- 1. Birth figures are based on births occurring in the data year, but incorporate a small number of late registrations from births occurring in the previous year.
- 2. There is a large degree of comparability in birth statistics between countries within the UK. However, there are some differences although these are believed to have a negligible impact on the comparability of the statistics. These differences are outlined in Quality and Methodology Information (275.2 Kb Pdf) document for births.
- 3. The total fertility rate (TFR) is the average number of live children that a group of women would each have if they experienced the age-specific fertility rates of the calendar year in question throughout their childbearing lives. The TFR provides an up-to-date measure of the current intensity of childbearing. Changes in timing of births may influence the TFR; for example if women are increasingly delaying childbearing to older ages the TFR may underestimate average family size. National TFRs are calculated by summing single-year age-specific fertility rates over all ages within the childbearing years. TFRs for subnational areas (that is regions, counties, unitary authorities and health authorities/boards) are calculated by summing five-year age-specific fertility rates over all childbearing ages and then multiplying by five (this method gives more robust TFRs for areas with smaller populations). For more information on how the TFRs are calculated, please see section 2.19 in the births metadata (439.7 Kb Pdf). The TFRs for 2011 and 2012 have been calculated using the mid-year population estimates based on the 2011 Census. The TFRs for 2002–2010 have been recalculated using revised mid-year population estimates which take account of the 2011 Census and therefore may differ from previously published figures.
- 4. Stillbirth definition a baby born after 24 or more weeks completed gestation and which did not, at any time, breathe or show signs of life.
- 5. The Human Fertilisation and Embryology Act 2008 contained provisions enabling two females in a same-sex couple to register a birth from 1 September 2009 onwards. Due to the small numbers of births registered to same sex couples, births registered within a civil partnership are included with births registered within marriage. Births registered by a same-sex couple outside of a civil partnership have been included with births registered outside marriage. The impact on 2012 birth statistics is negligible since only

- 0.1% of live births were registered to same-sex couples. In 2012 there were 556 live births registered to same-sex couples in a civil partnership and 252 live births registered to same-sex couples outside a civil partnership.
- 6. The 2012 standardised mean (average) age of mother has been calculated using the mid-2012 population estimates. The standardised mean age of mother is used in order to eliminate the impact of any changes in the distribution of the population by age and therefore enables trends over time to be analysed. Standardised means are calculated using rates per thousand female population by single year of age of mother.
- 7. A list of the names of those given pre-publication access to the statistics and written commentary is available in Pre-release access list for Birth Summary Tables 2012. The rules and principles which govern pre-release access are featured within the Pre-release Access to Official Statistics Order 2008.
- 8. Special extracts and tabulations of births data for England and Wales are available to order (subject to legal frameworks, disclosure control, resources and agreements of costs, where appropriate). Such enquiries should be made to:

Vital Statistics Outputs Branch
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Life Events and Population Sources Division
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The ONS charging policy is available on the ONS website.

- 9. We would welcome feedback on the content, format and relevance of this release. The Health and Life Events (HLED) User Engagement Strategy is available to download from the ONS website. Please send feedback to the postal or email address above.
- 10. Follow ONS on Twitter and Facebook.
- 11. Details of the policy governing the release of new data are available by visiting www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html or from the Media Relations Office email: media.relations@ons.gsi.gov.uk

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics: - meet identified user needs; - are well explained and readily accessible; - are produced according to sound methods; and - are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.