

Statistical bulletin

Birth characteristics in England and Wales: 2017

Annual live births by sex, ethnicity and month, maternities by place of birth and with multiple births, and stillbirths by age of parents and calendar quarter.



Release date: 10 January 2019

Next release: October to November 2019

Table of contents

- 1. Main points
- 2. Statistician's comment
- 3. Things you need to know about this release
- 4. Average ages of mothers and fathers of all babies have continued to rise
- 5. Home births more likely among women after having their first child
- 6. The rate of women having multiple births at ages 45 years and over decreased to its lowest level since 2006
- 7. Percentage of babies with low birthweight remains unchanged since 2011
- 8. Stillbirth rate highest among women aged 40 years and over
- 9. 26 September most popular day to be born over the period 1995 to 2017
- 10. Links to related statistics
- 11. Quality and methodology

1. Main points

- In 2017, there were 679,106 live births in England and Wales, the lowest number of live births since 2006; of these, 51.3% were boys and 48.7% were girls.
- The average age of first-time mothers was 28.8 years in 2017, unchanged since 2016; the average age of all fathers increased to 33.4 years in 2017, up from 33.3 years in 2016.
- 42% of all live births were first births, 35% were second births and 23% were third or subsequent births in 2017.
- The percentage of women giving birth at home was 2.1% in 2017, unchanged from 2016 but a slight decline compared with 2012 to 2015 when 2.3% of women gave birth at home.
- 15.8 out of every 1,000 women giving birth had a multiple birth in 2017; this is the second consecutive annual decline in the multiple maternity rate, decreasing from 15.9 in 2016 and 16.1 in 2015.
- Women aged 45 years and over were the age group most likely to have a multiple birth in 2017, where 77.6 out of every 1,000 women giving birth in this age group had a multiple birth; however, this represents the lowest multiple maternity rate for women aged 45 years and over since 2006.
- 7.0% (47,257) of live births in England and Wales were of low birthweight (under 2,500 grams) in 2017, unchanged since 2011.
- In England, the stillbirth rate in the most deprived areas was 5.5 per 1,000 total births, compared with 3.0 per 1,000 total births in the least deprived areas.
- 26 September was the most popular day to be born in England and Wales, with an average of 1,974 babies born on this day between 1995 and 2017.

2. Statistician's comment

"The stillbirth rate for England and Wales has decreased by nearly a fifth over the last decade and in 2017, it was at a record low with 4.2 stillbirths per 1,000 total births. Older mothers aged 40 years and over continue to have the highest stillbirth rate followed by mothers aged under 20 years.

"The stillbirth rate varies across England and Wales and in 2017, it was significantly higher in the most deprived areas of England compared with the least deprived areas; a similar trend was not seen in Wales, which may be due to the low number of stillbirths taking place there".

Kanak Ghosh, Vital Statistics Outputs Branch, Office for National Statistics.

Follow Vital Statistics Outputs Branch on Twitter @StatsLiz

3. Things you need to know about this release

Important information for interpreting these birth statistics:

- birth statistics represent births that occurred in England and Wales in the calendar year, but include a very small number of late registrations from the previous year
- figures are compiled from information supplied when births are registered as part of civil registration, a legal requirement
- where relevant, birth registrations are linked to their corresponding NHS birth notification to enable analysis
 of further factors such as gestation of live births and ethnicity of the baby
- a maternity is a pregnancy resulting in the birth of one or more children including stillbirths; the number of maternities therefore represents the number of women having babies rather than the number of babies born

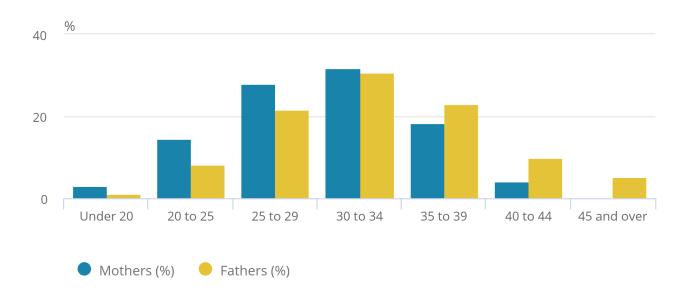
4. Average ages of mothers and fathers of all babies have continued to rise

In 2017, of all babies born in England and Wales, 69% had fathers aged 30 years and over (Figure 1); sole registered births, where the father's information is not available, have been excluded. Over the last two decades, the percentage of fathers aged 30 years and over has increased from 65% in 2007 and 60% in 1997. In contrast, 55% of mothers in 2017 were aged 30 years and over, up from 48% in 2007 and 43% in 1997.

Figure 1: Percentage of live births by age group of mother and father, 2017

Figure 1: Percentage of live births by age group of mother and father, 2017

England and Wales



Source: Office for National Statistics

Notes:

- 1. Percentages may not sum due to rounding.
- 2. For fathers, the percentages have been calculated excluding births that were registered solely by the mother and the father's information was not recorded.

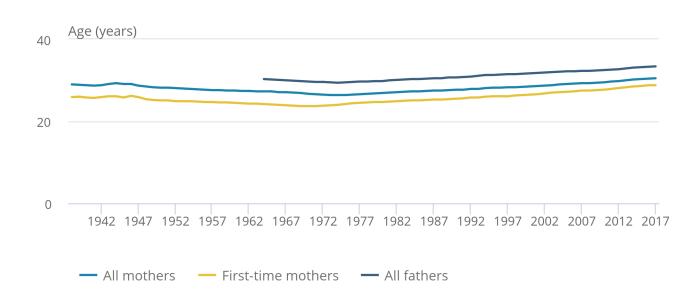
Measures of male fertility show that fertility rates have been highest for men aged 30 to 34 years since 1993; fertility rates for women are also highest at ages 30 to 34 years but only since 2004. Compared with 2007, fertility rates for men in 2017 are lower at ages under 35 years and higher at ages 35 to 60 and over. A similar change has also taken place among women; fertility rates in 2017 were lower for women aged under 30 years, but higher at older ages compared with 2007. Rising fertility rates at older ages have affected the average age of mothers and fathers.

The average (standardised mean) age of all fathers of babies born in England and Wales in 2017 was 33.4 years, up slightly from 33.3 years in 2016. A small rise was also recorded in the average age of mothers, at 30.5 years in 2017, up from 30.4 years in 2016. Since 1964, changes in the average age of fathers have mirrored changes in the average age of mothers, with the average age being around three years higher for fathers than mothers (Figure 2); a long-term rise has been recorded since 1975 in the average ages of mothers and fathers reflecting trends to delay childbearing to later ages.

Figure 2: Average age of mothers and fathers at the birth of their child, 1938 to 2017

Figure 2: Average age of mothers and fathers at the birth of their child, 1938 to 2017

England and Wales



Source: Office for National Statistics

Notes:

- 1. Standardised means (averages) have been used to eliminate the impact of any changes in the distribution of the population by age. More information is available in the Quality and Methodology section.
- 2. Fathers' information is not available electronically prior to 1964.

The average age of first-time mothers in 2017 was 28.8 years and has increased from 27.5 years a decade ago in 2007. Since the 1940s, the average age of first-time mothers has increased by nearly 3.0 years compared with an increase of 1.7 years in the average age of all mothers. Information about previous children is only collected from mothers at birth registration, therefore it is not possible to calculate the average age of first-time fathers.

In 2017, of all live births in England and Wales, 42% were first births, 35% were second births and 23% were third or subsequent births.

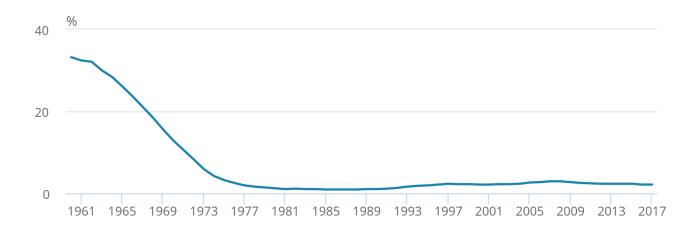
5. Home births more likely among women after having their first child

In 2017 in England and Wales, 2.1% of women gave birth at home (Figure 3). Between 1997 and 2017, the percentage of women giving birth at home remained relatively stable, rising only very slightly from 2.3% in 1997 to 2.9% in 2007 and 2008 before decreasing to 2.1% in 2016 and 2017.

Figure 3: Percentage of women giving birth at home, 1960 to 2017

Figure 3: Percentage of women giving birth at home, 1960 to 2017

England and Wales



Source: Office for National Statistics

Notes:

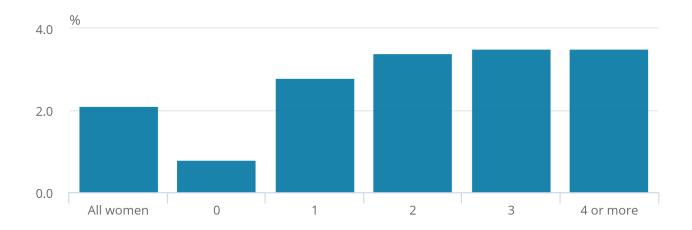
1. This chart shows the percentage of women giving birth at home rather than the percentage of babies born at home - this includes stillbirths.

Women are more likely to have a home birth after the first live-birth of a child, and 3.1% of these mothers in 2017 gave birth at home. In contrast, only 0.8% of women having their first child gave birth at home. Home births are most likely among women who had previously had three or more live-born children and 3.5% of these mothers gave birth at home in 2017 (Figure 4).

Figure 4: Percentage of women giving birth at home by number of previous live-born children, 2017

Figure 4: Percentage of women giving birth at home by number of previous live-born children, 2017

England and Wales



Source: Office for National Statistics

In England, 2.1% of women gave birth at home in 2017 compared with 2.5% in Wales. Within England, the South West and the North East regions had the highest and lowest percentages of women giving birth at home at 3.1% and 1.1% respectively. The percentage of women who gave birth at home also varied by local authority; within England it varied from 8.0% in North Dorset to 0.5% in Bolsover and within Wales it varied from 8.1% in Powys to 0.8% in Blaenau Gwent.

6. The rate of women having multiple births at ages 45 years and over decreased to its lowest level since 2006

In 2017, there were 10,462 women who gave birth to twins, 154 had triplets and five had quadruplets and above. These multiple maternities include both live births and stillbirths.

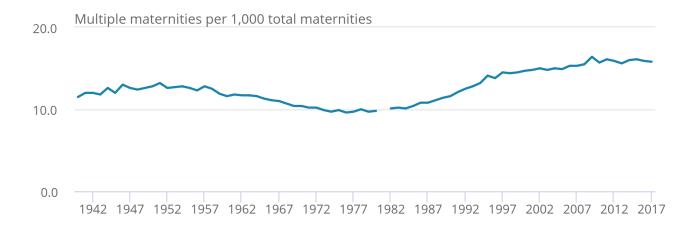
Although most multiple births occur naturally, many occur because of fertility treatment. On average, babies born from multiple births tend to have lower birthweights than singletons; multiple pregnancies are also associated with a higher risk of stillbirth, infant deaths and child disability.

The multiple maternity rate in 2017 continued to decrease for the third consecutive year, to 15.8 per 1,000 women giving birth, from 15.9 in 2016 and 16.1 in 2015. The largest increase in the multiple maternity rate was recorded between 1990 and 1995, when the rate increased by 22% from 11.6 to 14.1 (Figure 5).

Figure 5: Multiple maternity rate, 1940 to 2017

Figure 5: Multiple maternity rate, 1940 to 2017

England and Wales



Source: Office for National Statistics

Notes:

1. Maternity figures for 1981 are not available due to a registrars' strike. Due to the delay of live birth returns only a 10% sample was processed.

Since 1993, women aged 45 years and over have consistently recorded the highest multiple maternity rate; this is due to higher levels of assisted fertility treatments at these ages, including medicines that stimulate ovulation and assisted conception, which includes In Vitro Fertilisation (IVF). In 2017, the rate for women aged 45 years and over was 77.6 multiple maternities per 1,000 maternities, the lowest level since 2006 and down from a high of 115.5 in 2012. The multiple maternity rate for women aged 45 years and over has fluctuated slightly over time – a likely consequence of the smaller number of women having babies at this age.

It is estimated that <u>IVF conceptions are seven times more likely to result in a multiple birth than natural conceptions</u>. With more than 20,000 IVF babies born in the UK in 2016, IVF contributes significantly to the multiple birth rate.

In January 2009, the Human Fertilisation and Embryology Authority (HFEA) introduced a <u>policy to minimise the</u> <u>risk of multiple births from IVF treatment</u>. The policy set an overall goal to reduce the national multiple birth rate to 10% and a maximum multiple birth rate that clinics must not exceed, which has been lowered each year since 2009. The HFEA monitors and inspects clinics to ensure they are working towards the target and each clinic must have its own "multiple births minimisation strategy".

7. Percentage of babies with low birthweight remains unchanged since 2011

Low birthweight (under 2,500 grams), one of the known risk factors for infant deaths, can be caused by several factors including smoking. Babies born to women who smoke weigh on average 200 grams less than babies born to non-smokers (NHS, Stop smoking in pregnancy).

In England and Wales, 7.0% (47,257) of live births were low birthweight in 2017, unchanged since 2011. The percentage of live births of low birthweight was higher in England (7.0%) than Wales (6.8%) in 2017.

The percentage of live births with low birthweight varied by region within England; the West Midlands had the highest percentage of low birthweight babies (8.1%); the South West had the lowest percentage (5.9%). The percentage of live births under 2,500 grams is also available by local authority.

In 2017, the percentage of live births with low birthweight also varied by <u>National Statistics Socio-Economic Classification</u> (NS-SEC) in England and Wales. A higher percentage of babies were born with low birthweight in households employed in intermediate and routine occupations (between 6.5% and 8.4% of live births depending upon NS-SEC class), compared with those employed in higher managerial, administrative and professional occupations, for which between 5.9% and 6.6% of live births were of low birthweight.

In contrast, gestational diabetes and a Body Mass Index (BMI) over 30 in the mother are some of the risk factors for babies that are large for gestational age (NHS, Overweight and pregnant), and babies born weighing more than 4,000 grams are considered to be of high birthweight.

In 2017, of all live births in England and Wales 10.5% were of high birthweight, relatively unchanged since 2009 (when live births with a birthweight of 4,000 grams and above were first published). The proportion of babies of high birthweight was lower in England (10.4%) compared with Wales (11.7%). Within England, the South West had the highest percentage of live births with a high birthweight (11.8%), while London had the lowest (8.5%).

8 . Stillbirth rate highest among women aged 40 years and over

The stillbirth rate decreased to 4.2 per 1,000 total births in England and Wales in 2017; the lowest rate on record. Since 2007, the stillbirth rate has decreased by 19.2%. There are a <u>number of factors which may increase the risk of stillbirth</u>; these include:

- · having a multiple birth
- foetal growth restriction
- mothers aged over 35 years
- smoking, drinking alcohol or misusing drugs while pregnant
- maternal obesity
- mothers with a pre-existing physical health condition, such as epilepsy

A current government ambition is to <u>halve the stillbirth rate in England by 2025</u>. This would require the stillbirth rate in England to fall to 2.6 per 1,000 total births.

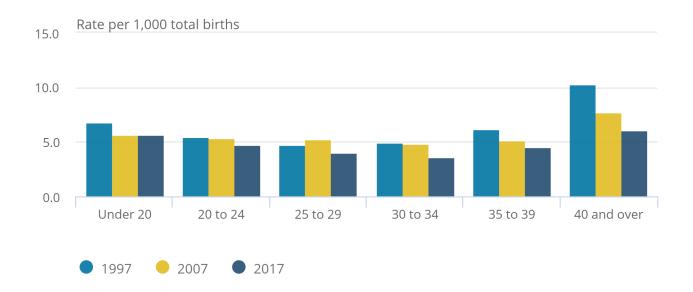
Figure 6 shows stillbirth rates by the age of the mother in 1997, 2007 and 2017; in all three years the highest rate was recorded among mothers aged 40 years and over followed by those aged under 20 years. Stillbirth rates in 2017 were lower for all age groups compared with 1997 and 2007 except those aged under 20 years; the stillbirth rate for women aged under 20 years was slightly higher in 2017 than in 2007. These changes should be interpreted with some caution as stillbirth rates for some age groups are based on relatively small numbers of stillbirths and are therefore subject to random fluctuations making them less robust.

Figure 6: Stillbirth rates by age of mother, 1997, 2007 and 2017

England and Wales

Figure 6: Stillbirth rates by age of mother, 1997, 2007 and 2017

England and Wales



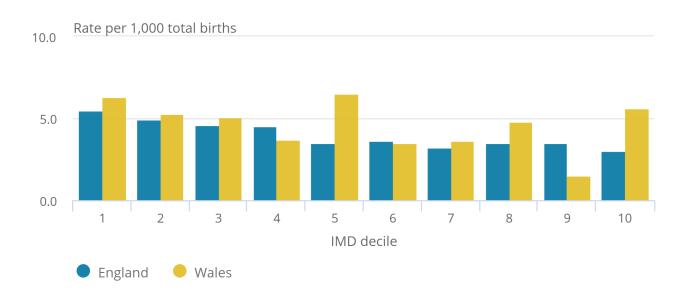
Source: Office for National Statistics

The stillbirth rate was significantly higher in the most deprived areas (based on mothers' usual residence) compared with the least deprived areas in England in 2017 (Figure 7). In England, the stillbirth rate in the most deprived areas was 5.5 per 1,000 total births, compared with 3.0 per 1,000 total births in the least deprived areas. A similar trend was not seen in Wales. It is difficult to draw conclusions from this due to the small number of stillbirths occurring in Wales.

Figure 7: Stillbirth rates by Index of Multiple Deprivation (IMD), 2017

Figure 7: Stillbirth rates by Index of Multiple Deprivation (IMD), 2017

England and Wales



Source: Office for National Statistics

Notes:

- 1. Deprivation is measured using The Index of Multiple Deprivation (IMD). There are different measures for England and Wales, which are not comparable.
- 2. Index of Multiple Deprivations (IMD) deciles range from 1 to 10, with 1 being the most deprived and 10 being the least deprived.
- 3. Index of Multiple Deprivation (IMD) is based on the area of usual residence of the mother.

9 . 26 September most popular day to be born over the period 1995 to 2017

A peak in births in late September shows that more babies are conceived in the weeks leading up to and the days after Christmas than at any other time of the year.

Eight of the top ten dates of birth were towards the end of September, with 26 September being the most popular over the period 1995 to 2017. On average, there were 1,974 live births on 26 September during this period (Figure 8).

The least popular date of birth over this period was Boxing Day, followed by Christmas Day, with, on average, 1,357 and 1,425 live births respectively.

Figure 8: Average daily births, 1995 to 2017

England and Wales

10. Links to related statistics

More data on births in England and Wales by <u>birth characteristics</u> (stillbirths, home births, hospital births, multiple births, birthweight, gestational age and ethnicity) and <u>parents' characteristics</u> (age of mother and father, type of birth registration, previous live-born children, and National Statistics Socio-economic Classification (NS-SEC)) are available.

Five <u>explorable datasets</u> providing more detailed birth statistics were published on 18 July 2018 alongside our <u>first release of annual birth statistics for 2017</u>. These explorable datasets include statistics based on characteristics of mother and father, as well as live birth figures for small geographical areas such as Lower layer Super Output Areas and wards. These explorable datasets have been specially designed to protect the confidentiality of individuals.

More detailed statistics on family size can be found in our <u>Childbearing for women born in different years release</u>, which includes data tables on:

- average number of live-born children by age and year of birth of woman
- proportion of women who have had at least one live birth, by age and year of birth of woman; the proportion of women who have not had children is also available
- percentage distribution of women of childbearing age by number of live-born children, by age and year of birth of woman

Our datasets contain information on the other birth statistics packages released throughout the year and provides links to these; see the <u>GOV.UK release calendar</u> for information on planned publication dates.

The number of births, birth rates and mean age of mother for the UK and constituent countries can be found in the <u>Vital statistics in the UK: births, deaths and marriages</u>, international comparisons of live birth rates are also available.

An overview of stillbirth numbers and rates in England and Wales since 1927 and a European comparison was published in September 2015. Further statistics on stillbirths, including figures by cause group, birthweight and pregnancy, and ethnic factors can be found in Child mortality statistics.

Special extracts and tabulations of birth data for England and Wales are available to order (subject to legal frameworks, disclosure control, resources and our <u>charging policy</u>, where appropriate). Enquiries should be made to Vital Statistics Outputs Branch by email to <u>vsob@ons.gov.uk</u> or telephone on +44 (0)1329 444110. <u>User requested data</u> will be published.

11. Quality and methodology

The datasets published as part of this release provides birth statistics for England and Wales by birth (stillbirths, home births, hospital births, multiple births, birthweight, gestational age and ethnicity) and parents' characteristics (age of mother and father, type of birth registration, previous live-born children, and National Statistics Socio-economic Classification (NS-SEC)).

Some of the main summary figures have been published previously; detailed data on live births have also been available since 18 July 2018 via our new <u>explorable datasets</u>. This is however, the first time that birth statistics for 2017 have been published on:

- mean age of mother by birth order
- median interval between births
- number of previous live-born children
- National Statistics Socio-economic Classification (NS-SEC) of household as defined by occupation
- birthweight and low birthweight by mother's area of usual residence
- gestational age and ethnicity
- age of parents and quarter of occurrence for stillbirths
- · day and month of occurrence for live births
- place of birth
- multiple maternities

Birth statistics are used for planning maternity services, to inform policy decisions and resource allocation, for example, deciding numbers of school places required. They also enable the analysis of social and demographic trends.

The Births quality and methodology information contains important information on:

- the strengths and limitations of the data and how it compares with related data
- uses and users
- how the output was created
- the quality of the output: including the accuracy of the data

Our <u>User guide to birth statistics</u> provides further information on data quality, legislation and procedures relating to births and includes a glossary of terms.

There is a large degree of comparability in birth statistics between UK countries. 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 our <u>Quality and methodology information</u> for births.

The Revisions policy for population statistics (including birth statistics) is available.

A stillbirth is a baby born after 24 or more weeks completed gestation and which did not, at any time, breathe or show signs of life.

Statistics on home births show the number of women giving birth at home (maternities), rather than the number of babies born at home.

The standardised average (mean) age of father and mother has been used to eliminate the impact of any changes in the distribution of the population by age; this enables trends over time to be analysed. Standardised means are calculated using rates per 1,000 male or female population by single year of age.

Information on the occupation of each parent is coded for only a sample of 1 in 10 live births. Combining this with the employment status, a code for socio-economic classification may be derived. A combined method is used for reporting National Statistics Socio-economic Classification (NS-SEC) for birth statistics (using the most advantaged NS-SEC of either parent and creating a household level classification). The combined method means that sole registered births where information on the father is not available are included in published birth statistics by NS-SEC. Our <u>User Guide to Birth Statistics</u> provides further information on NS-SEC. The <u>three-class version</u> has been used to report figures in this bulletin.