

Statistical bulletin

# Conceptions in England and Wales: 2018

Annual statistics on conceptions to residents of England and Wales, with numbers and rates by age group including women aged under 18 years.



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# 1 . Main points

- In 2018, there were an estimated 839,043 conceptions to women of all ages in England and Wales compared with 847,204 in 2017, a decrease of nearly 1.0%.
- The conception rate for women under 18 years decreased for the 11th year in a row, the longest continued decrease since records began.
- The percentage of conceptions leading to a legal abortion among all women resident in England and Wales increased from 22.7% in 2017 to 24.0% in 2018, the highest percentage since records began in 1990.
- In 2018, the conception rate for women under 18 years was higher in the 50% most deprived areas in England, while the percentage of conceptions leading to a legal abortion was higher in the 50% least deprived areas in England.
- For the third year in a row, women aged 40 years and over were the only age group to see an increase in conception rates; in 2018, there were 16.3 conceptions per 1,000 women aged 40 years and over.

## Statistician's comment

"In 2018, the conception rate in England and Wales fell to its lowest level since 2004, while the proportion that led to a legal abortion increased to its highest point since records began in 1990.

"Although conception rates for women under 18 years have more than halved in the last decade, they remain twice as high in more deprived areas of England than less deprived areas. However, analysis shows that a smaller proportion of these conceptions lead to abortions for under 18s living in more deprived areas."

David Corps, Vital Statistics Outputs Branch, Office for National Statistics.

Follow Vital Statistics Outputs Branch on Twitter [@NickStripe\\_ONS](https://twitter.com/NickStripe_ONS).

## 2 . Number of conceptions and conception rates

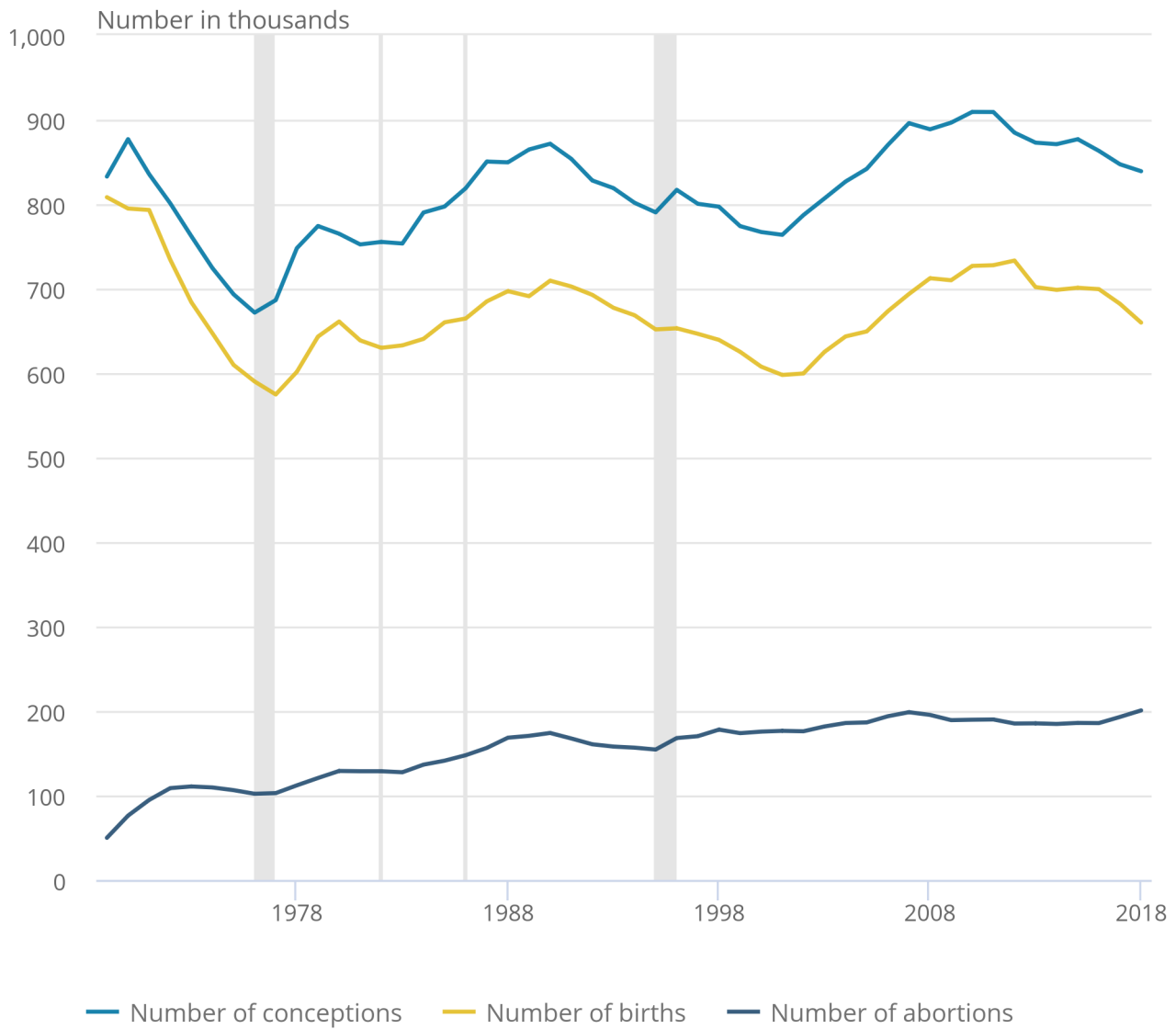
For the third consecutive year, the estimated number of conceptions in England and Wales decreased in 2018, falling by nearly 1.0% to 839,043 from 847,204 in 2017 (Figure 1). The number of conceptions indicate that births and birth rates, available later this year, are likely to have continued to decline in 2019.

**Figure 1: The number of abortions increased while the number of conceptions and births continued decreasing in 2018**

Number of conceptions, births and abortions for all women, England and Wales, 1969 to 2018

Figure 1: The number of abortions increased while the number of conceptions and births continued decreasing in 2018

Number of conceptions, births and abortions for all women, England and Wales, 1969 to 2018



Source: Office for National Statistics – Conceptions in England and Wales

Notes:

1. Abortion numbers taken from the [Department of Health and Social Care](#).
2. Number of births include live births and stillbirths.
3. Prior to 1969, the first full year for which abortions data were available, the number of conceptions was equivalent to the number of maternities.
4. Sharp decreases in number of conceptions and births that occurred between 1970 and 1976 could be explained by the [increased use of contraception](#) over this period.
5. Several scares about the [safety of the contraceptive pill](#) between 1976 and 1996 may have led to increases in the number of conceptions due to less reliable contraception methods, if any, being used.

This trend is mirrored in conception rates for all women resident in England and Wales. Conception rates provide a better measure than the number of conceptions as they account for the size and age structure of the female population.

In 2018, the overall conception rate fell from 76.1 conceptions per 1,000 women aged 15 to 44 years, to 75.4 conceptions, a 0.9% decrease. This rate has been decreasing almost every year since 2011, with the exceptions of 2014 and 2015. The overall conception rate has not been this low since 2004 when there were 74.9 conceptions per 1,000 women aged 15 to 44 years.

### 3 . Age at conception

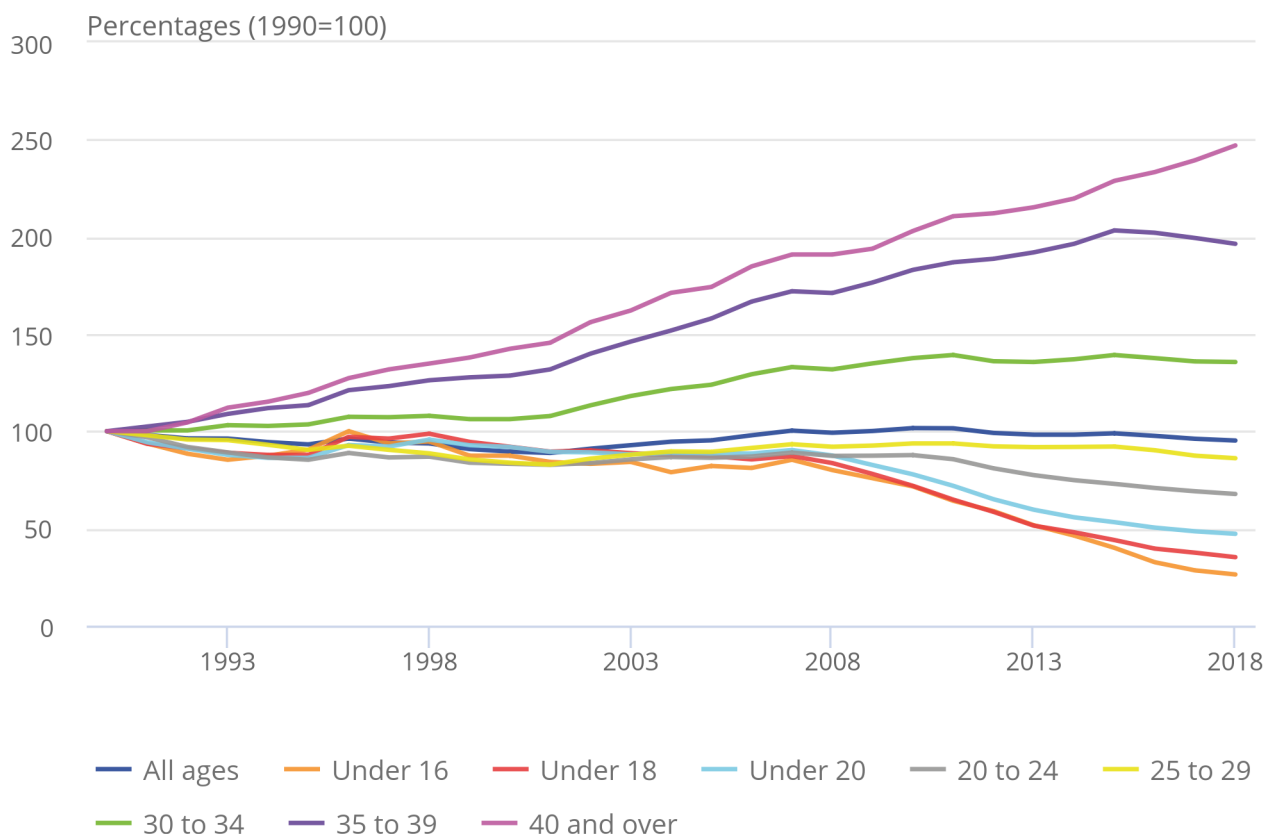
For the third consecutive year, women aged 40 years and over was the only age group where the conception rate increased. In 2018, there were 16.3 conceptions per 1,000 women aged over 40 years. Compared with 1990, conception rates for women aged 30 years and over have increased while rates for women aged under 30 years have decreased (Figure 2). This reflects the trends in birth rates discussed in our [Births in England and Wales](#) publication. Women are progressively delaying childbearing until older ages.

**Figure 2: Conception rates for women aged 40 years and over have more than doubled since 1991**

Relative changes in age-specific conception rates, England and Wales, 1990 to 2018

Figure 2: Conception rates for women aged 40 years and over have more than doubled since 1991

Relative changes in age-specific conception rates, England and Wales, 1990 to 2018



Source: Office for National Statistics – Conceptions in England and Wales

## 4 . Teenage conceptions

In 1999, the government announced its [10-year Teenage Pregnancy Strategy for England](#), which aimed to reduce the conception rate for women aged under 18 years. This was driven by relatively high conception rates in England and Wales compared with the [rest of Europe \(PDF 429KB\)](#), and the potential [adverse consequences of teenage pregnancy](#); for example, the risk of infant mortality is [higher in younger mothers](#).

[These initiatives](#), along with other factors such as a shift in aspirations of [young women towards education \(PDF, 439.98KB\)](#), led to a decline in conception rates for women aged 15 to 17 years. This decline has been particularly evident since 2007, which also coincided with [the start of the global financial crisis](#) (Figure 3). Since our records began in 1969, there has not been such a prolonged decrease in conception rates for women aged under 18 years.

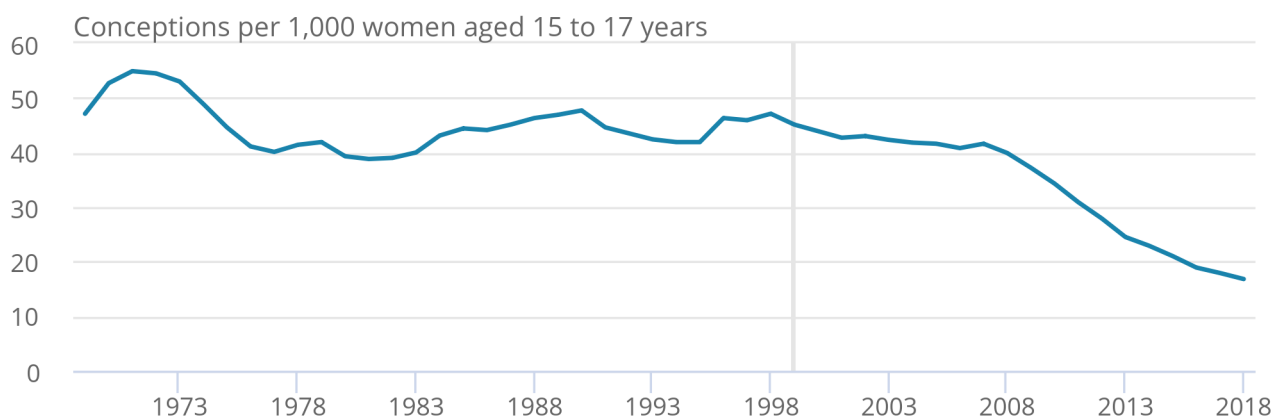
In 2018, conception rates for under 18-year-olds in England and Wales declined by 6.1% to 16.8 conceptions per 1,000 women aged 15 to 17 years. Since 1999, conception rates for women aged under 18 years have decreased by 62.7%.

**Figure 3: The continued decrease in conception rates for women under 18 years is the longest since records began**

Conceptions per 1,000 women aged 15 to 17 years, 1969 to 2018, England and Wales

Figure 3: The continued decrease in conception rates for women under 18 years is the longest since records began

Conceptions per 1,000 women aged 15 to 17 years, 1969 to 2018, England and Wales



Source: Office for National Statistics – Conceptions in England and Wales

Notes:

1. The conception rate is calculated by dividing the number of conceptions to women aged under 18 years by the female population aged 15 to 17 years.
2. Methodology for estimating age at conception changed from 1997. The rates for 1987 to 1996 were revised to provide a comparable time series from 1987 onwards. The conception rates for 1969 to 1986 are not directly comparable as they have been calculated using the previous methodology.

Similarly, conception rates declined from 2.7 conceptions per 1,000 women aged under 16 years in 2017 to 2.5 in 2018, a 7.4% decrease. The conception rate for women under 16 years has fallen every year since 2007, and has decreased by 69.9% since 1999.

## 5 . Conceptions leading to legal abortions

The percentage of conceptions leading to a legal abortion among women of childbearing age increased from 22.7% in 2017 to 24.0% in 2018. This is the highest percentage since records began (Figure 4).

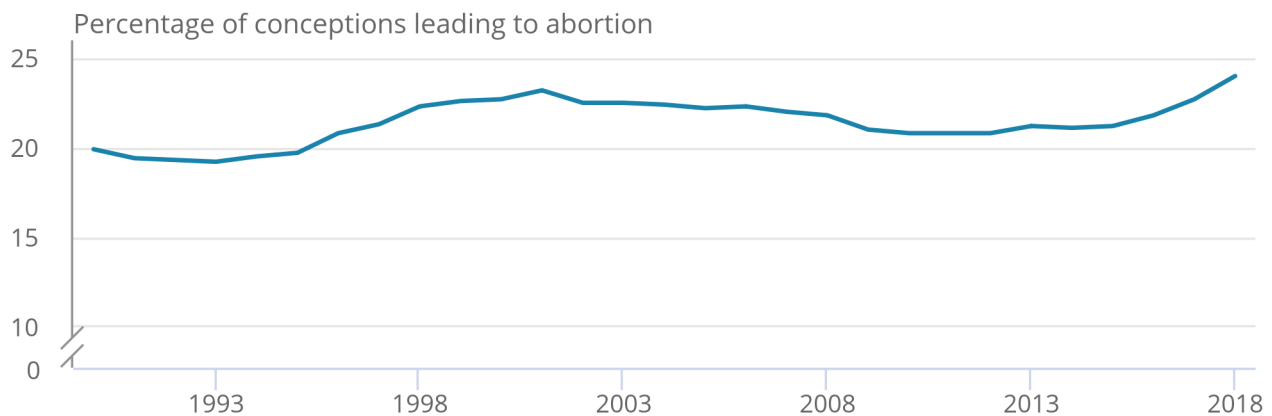
For the first time since 2013, the percentage of conceptions leading to a legal abortion increased for every age group. In 2018, the highest increase was recorded among women aged 20 to 24 years (1.8 percentage points) and the lowest among those under 16 years (0.9 percentage points).

**Figure 4: The percentage of conceptions leading to abortion was the highest since records began**

Percentage of conceptions leading to a legal abortion, 1990 to 2018, England and Wales

Figure 4: The percentage of conceptions leading to abortion was the highest since records began

Percentage of conceptions leading to a legal abortion, 1990 to 2018, England and Wales



Source: Office for National Statistics – Conceptions in England and Wales

## 6 . Conceptions by Index of Multiple Deprivation

The Index of Multiple Deprivation (IMD) is an overall measure of deprivation based on factors such as income, employment, health, education, crime, the living environment, and access to housing within an area. Deprivation measures are derived differently for [England](#) and [Wales](#) and are not, therefore, directly comparable.

Conception rates for the most deprived areas in England have decreased more than the least deprived areas since 2010 (Figure 5). In 2018, there were 82.4 conceptions per 1,000 women usually resident in the 50% most deprived areas in England, a decrease of 8.8% compared with 2010. In contrast, there were 67.5 conceptions per 1,000 women usually resident in the 50% least deprived areas, a decrease of only 2.2% compared with 2010.

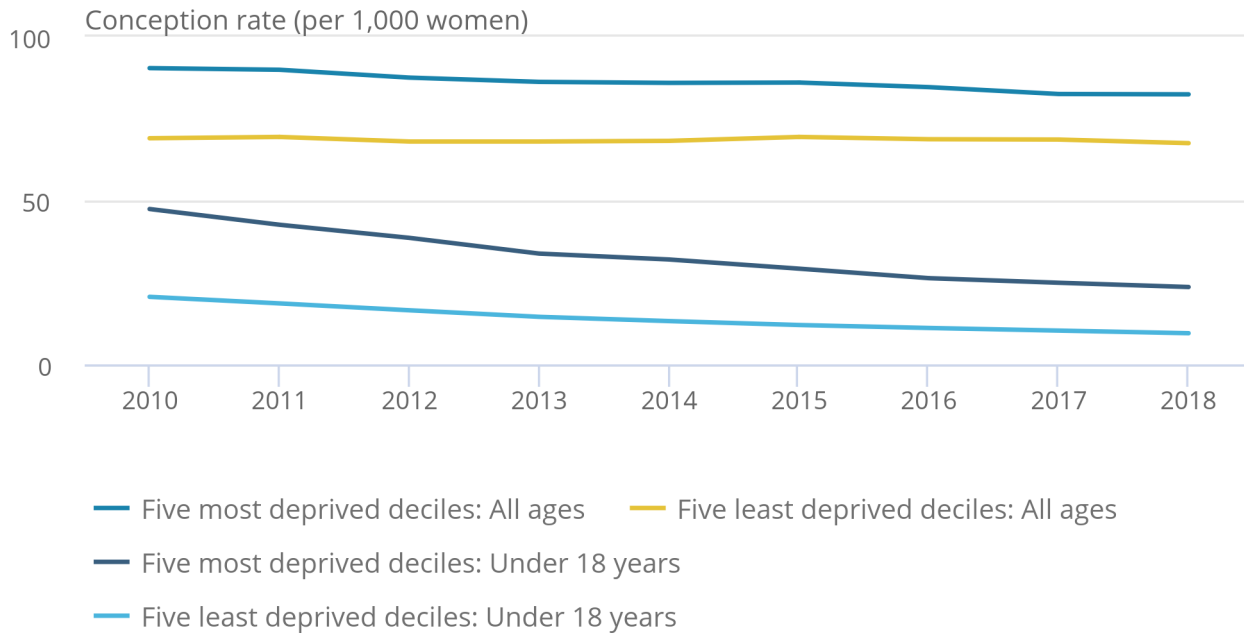
Since 2010, the conception rate for women under 18 years has halved in both the most and least deprived areas in England (Figure 5). As a result, conception rates for women under 18 years remain more than twice as high in the most deprived areas. In 2018, there were 23.6 conceptions per 1,000 women aged 15 to 17 years usually resident in the most deprived areas of England, whereas there were 9.5 conceptions per 1,000 women aged 15 to 17 years in the least deprived areas of England.

**Figure 5: The gap in conception rates for women under 18 years decreased between the most and least deprived areas of England**

Conception rates for all ages and women under 18 years by Index of Multiple Deprivation, England, 2010 to 2018

Figure 5: The gap in conception rates for women under 18 years decreased between the most and least deprived areas of England

Conception rates for all ages and women under 18 years by Index of Multiple Deprivation, England, 2010 to 2018



Source: Office for National Statistics – Conceptions in England and Wales

Notes:

1. The conception rate for all ages shows the number of conceptions per 1,000 women aged 15 to 44 years.
2. The conception rate for women under 18 years shows the number of conceptions per 1,000 women aged 15 to 17 years.
3. Deprivation is measured using the Index of Multiple Deprivation (IMD).
4. IMD deciles range from 1 to 10, with 1 being the most deprived and 10 being the least deprived.
5. For the years 2010 to 2012 the [English indices of deprivation 2010](#) have been used, for the years 2014 to 2017, the [English indices of deprivation 2015](#) have been used, while the [English indices of deprivation 2019](#) have been used for 2018. These are very similar but not strictly directly comparable.
6. Figures are based on mothers' usual area of residence, based on boundaries as of November 2019.

Despite the conception rate being higher for women under 18 years in the 50% most deprived areas in England, the percentage of conceptions leading to a legal abortion for women under 18 years is higher in less deprived areas. Since 2015, the percentage of conceptions leading to a legal abortion has been increasing for women of all ages (Figure 6).

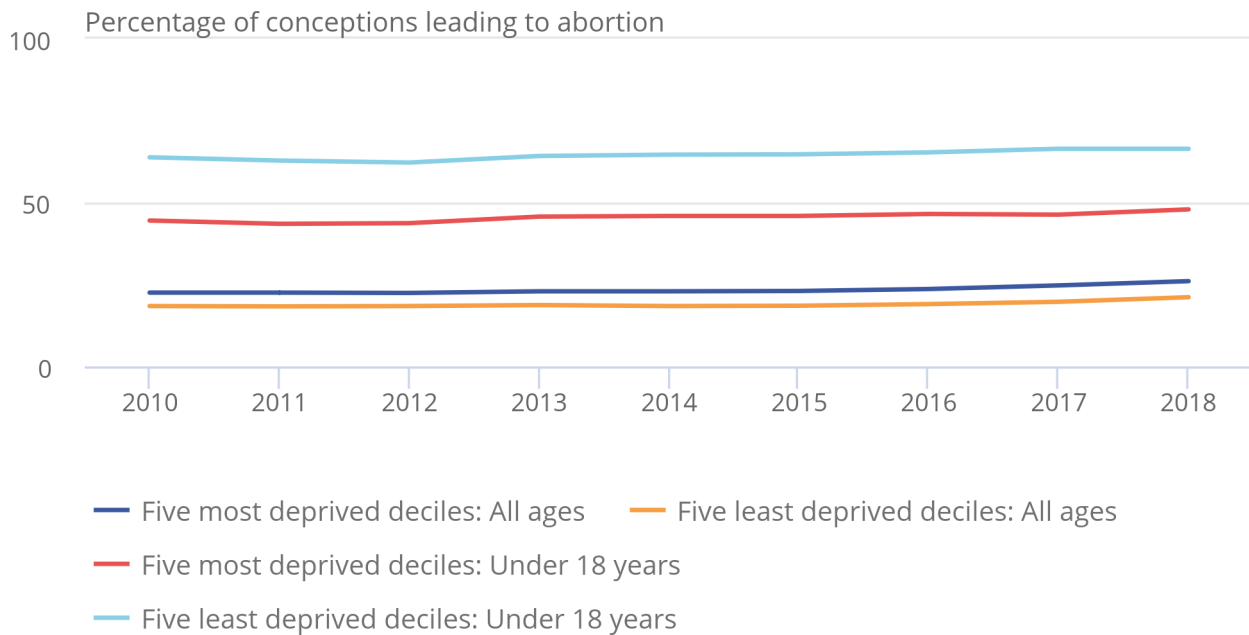


**Figure 6: The percentage of conceptions leading to abortion for women under 18 years was higher in the least deprived areas of England than in the most deprived areas**

Percentage of conceptions leading to legal abortion for all ages and women under 18 years by Index of Multiple Deprivation, England, 2010 to 2018

Figure 6: The percentage of conceptions leading to abortion for women under 18 years was higher in the least deprived areas of England than in the most deprived areas

Percentage of conceptions leading to legal abortion for all ages and women under 18 years by Index of Multiple Deprivation, England, 2010 to 2018



Source: Office for National Statistics – Conceptions in England and Wales

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 Deprivation (IMD) deciles range from 1 to 10, with 1 being the most deprived and 10 being the least deprived.
3. For the years 2010 to 2012 the [English indices of deprivation 2010](#) have been used, for the years 2014 to 2017, the [English indices of deprivation 2015](#) have been used, while the [English indices of deprivation 2019](#) have been used for 2018. These are very similar but not strictly directly comparable.
4. Figures are based on mothers' usual area of residence, based on boundaries as of November 2019.

It is difficult to draw conclusions from rates and percentages in Wales because of the relatively small number of conceptions to women under 18 years.

## 7 . Conceptions by area of usual residence

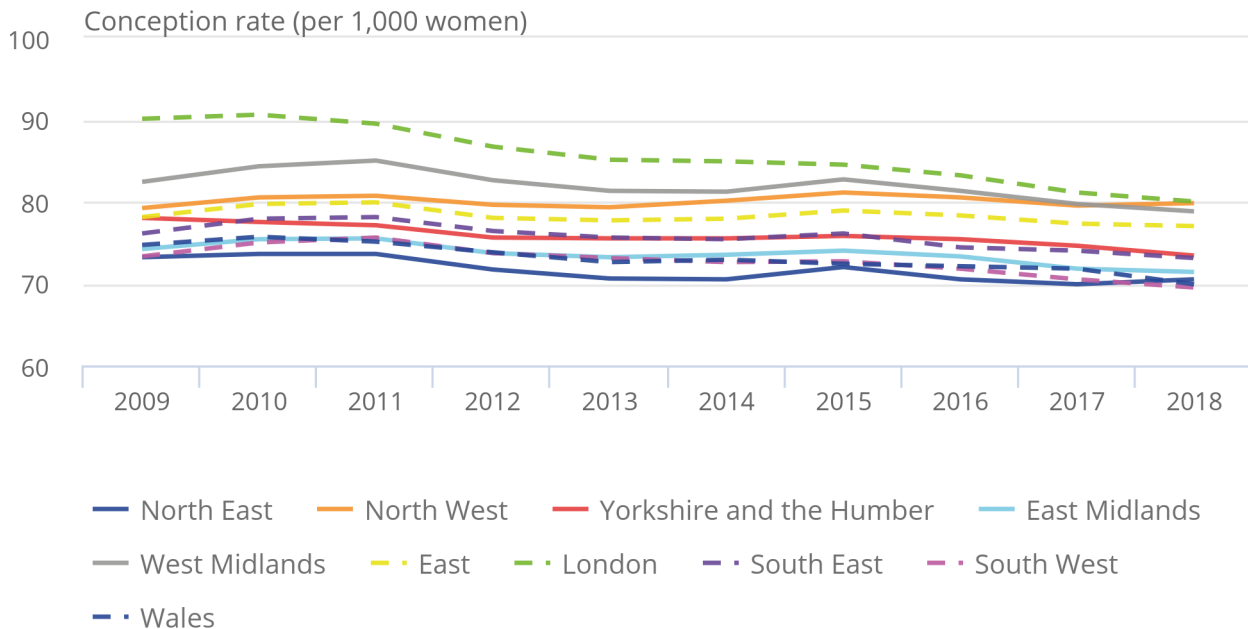
Since 2009, conception rates have declined in Wales and all English regions apart from the North West, where the rate increased from 79.2 conceptions per 1000 women of childbearing age to 79.8 in 2018. Although London still has the highest conception rate at 80.0 conceptions per 1,000 women aged 15 to 44 years, it is also the region where conception rates have declined the most over the last decade (Figure 7).

**Figure 7: Conception rates have decreased the most in London since 2009**

Conception rates per 1,000 women England and Wales, 2009 to 2018

### Figure 7: Conception rates have decreased the most in London since 2009

Conception rates per 1,000 women England and Wales, 2009 to 2018



Source: Office for National Statistics – Conceptions in England and Wales

**Notes:**

1. The conception rate shows the number of conceptions per thousand women aged 15 to 44 years.
2. Figures based on boundaries as of November 2019.

The percentage of conceptions leading to a legal abortion increased in all regions over the last decade. In 2018, the South West had the lowest percentage of conceptions leading to a legal abortion (21.6%), while London remained the region with the highest percentage of conceptions leading to a legal abortion (27.1%).

Although the North East had the third lowest overall conception rate in 2018, it has had the highest rate of conception to women under 18 years among English regions since 2003. In 2018, it increased to 24.9 conceptions per 1,000 women aged 15 to 17 years.

The South West replaced the South East as the region with the lowest rate, with 13.3 conceptions per 1000 women aged 15 to 17 years in 2018. The difference between regions with the highest and the lowest conception rates increased for the second year in a row and is the largest since 1998 when comparable data were first available.

Teenage conception rates vary at the local level and over time (Figure 8). When looking at rates for areas with small populations, it is important to consider the numbers involved. If there is a small change in the number of conceptions in these areas, there can be large changes in the rates. Other population characteristics can also have an impact, for example, the level of deprivation, ethnicity, and educational attainment.

### **Figure 8: Conception rates for women under 18 years have decreased across all local authorities compared with 1998**

**Conception rates for women under 18 years by local authority, England and Wales, 1998 and 2018**

#### **Notes:**

1. Conception rates have been calculated using 2018 [population estimates](#).

#### **Download this chart**

[.xlsx](#)

The conception rate for women under 18 years in Middlesbrough fell by 10.0% in 2018. Despite this decrease, Middlesbrough remained the local authority of England with the highest conception rate for women under 18 years for the second year in a row. The conception rate is 40.8% lower than in 1998.

Table 1: The 10 areas with the highest conception rates for women under 18 years in 2018 compared with 2017 and 1998  
England and Wales

Rank	Local authority	Number of conceptions 2018	Conception rate per thousand women aged 15 to 17 years		
			2018	2017	1998
1	Middlesbrough	88	39.4	43.8	66.5
2	Hartlepool	57	38.0	33.2	75.6
3	St. Helens	101	37.3	37.1	55.5
4	Hyndburn	50	37.1	32.8	71.8
5	Blackpool	79	36.9	32.9	64.8
6	Halton	80	36.6	34.9	47.1
7	Redcar and Cleveland	72	34.6	24.8	58.3
8	Thanet	73	33.3	29.1	59.2
9	Burnley	45	32.8	29.6	82.3
10	Ipswich	64	32.0	29.0	60.4

Source: Office for National Statistics – Conceptions in England and Wales

## 8 . Conceptions data

### [Conception statistics, England and Wales](#)

Dataset | Released 4 March 2020

Annual statistics on conceptions to residents of England and Wales; numbers and rates by age group, inside and outside marriage or civil partnership, and area of usual residence.

### [Quarterly conceptions to women aged under 18 years](#)

Dataset | Released 4 March 2020

Provisional quarterly statistics on the number of conceptions to women aged under 18 years by regions and other local authority areas within England and Wales.

## 9 . Glossary

### Abortion

The legal termination of a pregnancy under the [1967 Abortion Act](#).

### Conception

The Office for National Statistics (ONS) uses the definition of conception as a pregnancy of a woman that leads either to a maternity or an abortion.

## Live birth

A baby showing signs of life at birth.

## Maternity

Maternity refers to a pregnancy resulting in the birth of one or more live-born or stillborn children. The number of maternities represents the number of women giving birth rather than the number of babies born (live-born and stillborn).

## Notification

A notification is a document completed by the doctor or midwife present at the birth. The notification provides certain data items, such as the birthweight, to the birth record.

## 10 . Measuring the data

Conception statistics bring together records of birth registrations collected under the [Births and Deaths Registration Act 1953](#) and of abortion notifications supplied under the [Abortion Act 1967](#).

They include all the pregnancies of women resident in England and Wales which lead to one of the following outcomes:

- a maternity at which one or more live births or stillbirths occur, which is registered in England and Wales
- a termination of a pregnancy by abortion under the 1967 Act, which takes place in England and Wales; pregnancies that lead to miscarriages are not included

Conceptions in 2018 may result in maternities or abortions in 2018 or 2019. Maternities that result in one or more live births or stillbirths are counted once only.

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the [Conception statistics QMI](#).

## 11 . Strengths and limitations

Our [User guide to conception statistics](#) provides further information on data quality, legislation and procedures relating to conceptions, and includes a glossary of terms.

### National Statistics status for Conceptions in England and Wales

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

Date of most recent full assessment: [May 2012](#)

Most recent compliance check which confirms National Statistics status: [May 2012](#)

Improvements since last review:

- we revised the disclosure control protocol for abortion statistics in June 2015 ensuring confidentiality is sufficient to protect privacy of individual information, but not so restrictive as to limit unduly the practical utility of official statistics
- we have clearly commented on the [availability of information on illegal abortions](#) in our Quality and Methodology Information (QMI) report

## Methods and sources used to produce the conceptions data

Conceptions data are derived from combining numbers of maternities and abortions using information recorded at birth registration and abortion notification; there is a legal requirement to record these data, making them the best and most complete data sources available.

## Miscarriages and illegal abortion

Conception statistics do not include miscarriages or illegal abortions. It is impossible to determine the extent of illegal abortions, for example, by women using drugs bought from the internet. The only statistics available are where complications arise from illegal abortions resulting in illness or death. Given the steady rise in numbers of legal abortions since 1968, and the improvements in access to abortion, it can be assumed that the vast majority of abortions carried out in England and Wales today are legal.

## Date of conception

Information on the exact date of conception cannot be obtained from the birth registration or abortion notification, so formulae are used to estimate the date based on whether the conception resulted in a live birth, stillbirth or abortion. The formulae are published in our [User guide to conception statistics](#).

## 12 . Related links

### [Abortion Statistics, England and Wales: 2018](#)

Bulletin | Released 13 June 2019

Report produced by the Department of Health and Social Care providing statistics on abortions recorded in England and Wales in 2018.

### [Births in England and Wales: 2018](#)

Bulletin | Released 1 August 2019

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

### [Birth characteristics in England and Wales: 2018](#)

Bulletin | Released 6 December 2019

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.

### [Northern Ireland termination of pregnancy statistics 2018/19](#)

Publication | Released 22 January 2020

This publication presents information on the number of admissions with a diagnosis of medical abortion and termination of pregnancy to Health and Social Care Trusts in Northern Ireland during 2007 to 2008 and 2018 to 2019.

### [Teenage Pregnancy](#)

Publication | Released 2 July 2019

This release by Information Services Division (ISD) provides an annual update on teenage pregnancy statistics in Scotland.