Statistical bulletin:

Conceptions in England and Wales: 2014

Annual statistics on conceptions covering conception counts and rates, by age group including women under 18.

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1. Main points

The under 18 conception rate for 2014 is the lowest since 1969 at 22.9 conceptions per thousand women aged 15 to 17.

The estimated number of conceptions to women aged under 18 fell to 22,653 in 2014, compared with 24,306 in 2013, a decrease of 6.8%.

The estimated number of conceptions to women aged under 16 was 4,160 in 2014, compared with 4,648 in 2013, a fall of 10%.

In 2014 there were an estimated 871,038 conceptions to women of all ages, compared with 872,849 in 2013, a slight decrease of 0.2%.

Conception rates in 2014 increased for women aged 25 years and over, and decreased for women aged under 25 years.

2. Introduction

Conception statistics bring together records of birth registrations collected under the Births and Deaths Registration Act (1953) and abortion notifications received under the Abortion Act (1967), amended by the Human Fertilisation and Embryology Act (2008). They include all pregnancies of women usually resident in England and Wales which lead to one of the following outcomes:

- a maternity registered in England and Wales at which one or more live births or stillbirths occur
- a termination of a pregnancy by abortion under the 1967 Act, which takes place in England and Wales

Conception statistics do not include conceptions resulting in miscarriages or illegal abortions (more information in background note 1).

3. Number of conceptions and conception rates
In 2014 the estimated number of conceptions in England and Wales fell by 0.2% to 871,038 from 872,849 in 2013. The number of conceptions rose between 2001 and 2010 despite a slight fall in 2008. Since 2010 the number has fallen from a peak of 909,245 conceptions.

**Figure 1: The number of conceptions and the conception rate, 1969 to 2014**

**England and Wales**

![Graph showing the number of conceptions and conception rate from 1969 to 2014]

**Source:** Office for National Statistics

**Notes:**

1. The conception rate is the number of conceptions per thousand women aged 15 to 44

2. Prior to 1969, the first full year for which abortions data are available, the number of conceptions was equivalent to the number of maternities
Following the introduction of the Abortion Act (1967) the number of conceptions increased (Figure 1). The sudden decline in conceptions in the early to mid 1970s, despite a rise in the number of women in childbearing ages could be explained by the increased use of contraception (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1297204/?page=1). Oral contraception for married women was introduced in 1961, but was a chargeable prescription. In 1970 there was a mandate for family planning clinics to start treating single women. In 1974 contraception became free on the National Health Service (NHS), opening up services to women regardless of marital status and ability to pay.

There have been a number of scares about the safety of the contraceptive pill (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1297204/?page=1). These scares deterred some women from using the pill as a method of contraception due to concerns about their health (http://webarchive.nationalarchives.gov.uk/20160105160709/http:/www.ons.gov.uk/ons/rel/population-trends-rd/population-trends/no--89--autumn-1997/index.html). This may have led to a number of women using less reliable methods of contraception or no contraception at all. These pill scares correspond to increases in the number of conceptions and occurred in 1976 to 1977, 1983, 1986 and 1995 to 1996.

The gradual increase in conceptions between 2001 and 2010 results from an overall increase in the number of conceptions at all ages with the exception of those aged under 20. Factors influencing the increasing age at conception are explored in a later section.

The conception rate for 2014 has remained unchanged from 2013 at 77.8 conceptions per thousand women aged 15 to 44. The percentage of all conceptions resulting in a maternity in 2014 has also remained unchanged from 2013 at 79%. This proportion has remained fairly stable over the last 2 decades.

The size of the female population of childbearing age (women aged 15 to 44) will influence the number of conceptions. The composition of the female population will also influence the number of conceptions as there are peak age groups for maternities (25 to 29 and 30 to 34) and abortions (20 to 24) and the relative sizes of these groups will impact upon the number of conceptions. Changes in the size of the population are determined by births of females in previous years, mortality and migration.

The overall conception rate remained constant between 2013 and 2014 even though there was a 0.2% decrease in the number of conceptions as there was also a 0.2% fall in the female population of childbearing age.
4. Marital status at conception

There has been a long-term rise in the percentage of conceptions (and births) occurring outside marriage. In 2014 conceptions outside of a marriage/civil partnership accounted for 57% of all conceptions in England and Wales, compared with 55% in 2004 and 46% in 1994. In 2014 the percentage of conceptions outside marriage/civil partnership which resulted in a maternity was 69%, compared with 92% of conceptions inside marriage/civil partnership.

5. Age at conception

Between 2013 and 2014 conception rates increased for women aged 25 years and over, and decreased for women aged under 25 years. The largest percentage increase in conception rates occurred among women aged 35 to 39 (2.3%) while the largest decrease was for women aged under 20 (6.4%).
The conception rate for women aged 40 and over has more than doubled since 1990 (Figure 2) from 6.6 to 14.5 conceptions per thousand women. The number of women conceiving in this age group has risen from 12,032 in 1990 to almost 29,000 in 2014.

The conception rate for women aged 35 to 39 has seen similar increases, almost doubling since 1990. The 30 to 34 age group is the youngest age group in which conception rates have risen almost continuously since 1990, rising by over a third.
Reasons for an increased number of women conceiving at ages 30 and above include increased participation in higher education (http://www.tandfonline.com/doi/pdf/10.1080/00324728.2012.697569); increased female participation in the labour force (http://webarchive.nationalarchives.gov.uk/20160105160709/http:/www.ons.gov.uk/ons/rel/population-trends-rd/population-trends/no--131--spring-2008/index.html), the increasing importance of a career, the rising opportunity costs of childbearing, labour market uncertainty, housing factors and instability of partnerships.

The conception rate for women aged under 20 fell by 6.4% to 37.9 conceptions per thousand women aged 15 to 19 in 2014 (from 40.5 in 2013). This continues the overall downward trend since 2007 from 61.4 conceptions per thousand women. In 2014 conceptions to women aged under 18 accounted for 36% of all conceptions to women aged under 20, the same as in 2013.

In 2014 there were 22,653 conceptions to women aged under 18 compared with 24,306 in 2013, a decrease of 6.8%. This is the lowest number of conceptions in this age group since 1969 when comparable conception statistics were first produced and there were 45,495 conceptions to women aged under 18.

The under 18 conception rate for England and Wales was 22.9 in 2014 compared with 24.5 in 2013, a decrease of 6.5%. This is the lowest under 18 conception rate since comparable conception statistics were first produced in 1969 when the rate was 47.1 conceptions per thousand women aged 15 to 17. This fall in the conception rate in 2014 can be attributed to falls in both the conception rate leading to abortion and the conception rate leading to a maternity (decreases of 5.6% and 6.6% respectively). The under 18 conception rate continues the overall decline recorded since 1998 when there were 47.1 conceptions per thousand women aged 15 to 17, despite slight increases in 2002 and 2007. Since 1998 the conception rate for women aged under 18 has decreased by 51%.
Figure 3: Under 18 conception rate, 1969 to 2014

England and Wales

Source: Office for National Statistics

Notes:
1. ONS changed the methodology for estimating age at conception in 1997. 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 for estimating age at conception. Background note 2 provides more information.

The number of conceptions to women aged under 16 decreased by 10% from 4,648 in 2013 to 4,160 in 2014. In 2014 there were 4.4 conceptions per thousand women aged 13 to 15 compared with 4.9 in 2013, a decrease of 10%. This fall in the conception rate consists of a 7% fall in the rate of conceptions leading to abortion and an 11% fall in the rate of conceptions leading to a maternity.
Overall the under 16 conception rate has decreased since 2007 from 8.1 conceptions per thousand women aged 13 to 15, to 4.4 in 2014. The under 16 conception rate is the lowest since 1969, the first year for which we have comparable data, when a rate of 6.9 conceptions per thousand women aged 13 to 15 was recorded. Nearly three-quarters (72%) of under 16 conceptions in 2014 were to women aged 15.

There are a number of factors which could explain recent reductions in teenage conceptions, including:

- the programs invested in by successive governments (for example sex and relationship education, improved access to contraceptives and contraceptive publicity)
- a shift in aspirations of young women towards education
- the perception of stigma associated with being a teenage mother

6. Conceptions leading to abortion by age

The percentage of conceptions leading to a legal abortion varies by age group. Women aged 30 to 34 had the lowest percentage of conceptions leading to abortion (13% in 2014). In 2014 the age group with the highest percentage of conceptions leading to abortion was under 16 with 63% of conceptions leading to abortion.

Over the last 2 decades the percentage of conceptions leading to a legal abortion has generally increased for women aged under 25 but decreased for women aged 35 and over (Figure 4). For women in their 20s and early 30s the percentage of conceptions leading to abortion generally increased between 1992 and 2001, but decreased steadily until 2009 to 2010 before increasing slightly again.

In 2014, the percentage of conceptions leading to a legal abortion decreased from 2013 for women aged 40 and over. The percentage of conceptions leading to abortion increased in 2014 for all age groups under 40 compared with 2013.
Figure 4: Percentage of conceptions leading to legal abortion by age of woman at conception, 1994, 2004 and 2014

England and Wales

Source: Office for National Statistics
7. Why do teenage conceptions matter?

It is widely understood that teenage pregnancy and early motherhood can be associated with poor educational achievement, poor physical and mental health, social isolation, poverty and related factors. There is also a growing recognition that socio-economic disadvantage can be both a cause and a consequence of teenage motherhood (http://www.chimat.org.uk/teenconceptions).

Since 1998 there has been a reduction of more than 50% in the under 18 conception rate. However the rate remains higher than similar western European countries and progress varies between local areas. Maintaining the downward trend is a priority in the Department of Health Framework for Sexual Health Improvement in England (https://www.gov.uk/government/publications/a-framework-for-sexual-health-improvement-in-england). The government’s Public Health Outcomes Framework (2013 to 2016) (http://webarchive.nationalarchives.gov.uk/20160105160709/https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency) includes the under 18 teenage conception rate as 1 of 3 sexual health indicators and a number of other indicators disproportionately affecting young parents and their children. Local authorities, working with a range of partners, continue to lead in reducing teenage conceptions.

In Wales teenage conception rates are widely used as outcome indicators in the sexual health context, for example in the Sexual Health and Well-being Action Plan for Wales, 2010 to 2015 (http://www.shnwales.org.uk/Documents/485/Strategy%20(English).pdf), as well as being a general indicator of health and inequality, for example in Our Healthy Future (http://wales.gov.uk/topics/health/cmo/healthy/?lang=en). The conception rate for under 18 years is the most commonly used with the underage rate (under 16 years) being a key health indicator for children and young people.

8. Conceptions by area of usual residence

For women usually resident in England the overall conception rate remained at 78.0 conceptions per thousand women aged 15 to 44 in 2014, the same as in 2013. For women usually resident in Wales, the overall conception rate rose by 0.4% from 72.6 conceptions per thousand women aged 15 to 44 in 2013 to 72.9 in 2014.

A comparison of rates across regions in England for all ages shows that the North East had the lowest conception rate in 2014, with 70.5 conceptions per thousand women aged 15 to 44. London had the highest overall conception rate at 84.9.
9. Under 18 conceptions by area of usual residence

For women usually resident in England the under 18 conception rate fell by 6.2% from 24.3 conceptions per thousand women aged 15 to 17 in 2013 to 22.8 in 2014. A decrease was also recorded for women usually resident in Wales where the under 18 conception rate fell by 7.0% from 27.3 conceptions per thousand women aged 15 to 17 in 2013 to 25.4 in 2014. In 1998, the under 18 conception rate in England was 46.6 conceptions per thousand women aged 15 to 17 while in Wales the rate was 55.0 conceptions per thousand women aged 15 to 17. A comparison of under 18 conception rates for England and Wales can be seen in Figure 5.

**Figure 5: Under 18 conception rates, 1998 to 2014**

*England and Wales*

Source: Office for National Statistics

A comparison of rates across regions in England shows that the North East had the highest under 18 conception rate in 2014, with 30.2 per thousand women aged 15 to 17. The South East and South West had the lowest rate for women aged under 18 in 2014 (18.8).
It should be noted that at the local level, statistics for under 18 conceptions can fluctuate between years (due to an unusually high or low number of teenage conceptions in a year).

**Figure 6: Under 18 conception rates by local authority, 2014**

*England and Wales*
Rate per 1,000 women aged 15 to 17
(Total number of areas = 348)

- 32.7 to 43.0: 35 (5)
- 26.2 to 32.6: 82 (12)
- 20.0 to 26.1: 69 (10)
- 14.5 to 19.9: 97 (15)
- 5.2 to 14.4: 65 (10)

Source: ONS licensed under the Open Government Licence v.3.0. Contains OS data © Crown copyright 2016

1 To preserve confidentiality, counts for City of London and Isles of Scilly have been combined with those for Hackney and Cornwall respectively.

Source: Office for National Statistics
Table 1: The 10 areas with the highest under 18 conception rate in 2014

<table>
<thead>
<tr>
<th>Rank</th>
<th>Local Authority</th>
<th>Number of Conceptions 2014</th>
<th>2014</th>
<th>2013</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nuneaton and Bedworth</td>
<td>97</td>
<td>43.0</td>
<td>29.7</td>
<td>48.8</td>
</tr>
<tr>
<td>2</td>
<td>Stoke-on-Trent</td>
<td>176</td>
<td>42.4</td>
<td>43.9</td>
<td>68.5</td>
</tr>
<tr>
<td>3</td>
<td>Tamworth</td>
<td>60</td>
<td>42.0</td>
<td>44.0</td>
<td>55.7</td>
</tr>
<tr>
<td>4</td>
<td>North East Lincolnshire</td>
<td>117</td>
<td>40.8</td>
<td>43.3</td>
<td>69.8</td>
</tr>
<tr>
<td>5</td>
<td>Kigston upon Hull, City of</td>
<td>164</td>
<td>39.3</td>
<td>35.9</td>
<td>84.6</td>
</tr>
<tr>
<td>6</td>
<td>Preston</td>
<td>91</td>
<td>38.6</td>
<td>35.7</td>
<td>49.7</td>
</tr>
<tr>
<td>7</td>
<td>Sandwell</td>
<td>219</td>
<td>38.3</td>
<td>36.6</td>
<td>69.1</td>
</tr>
<tr>
<td>8</td>
<td>Norwich</td>
<td>68</td>
<td>38.1</td>
<td>31.4</td>
<td>53.7</td>
</tr>
<tr>
<td>9</td>
<td>Walsall</td>
<td>198</td>
<td>37.5</td>
<td>36.8</td>
<td>67.2</td>
</tr>
<tr>
<td>10</td>
<td>Blackpool</td>
<td>95</td>
<td>37.3</td>
<td>41.7</td>
<td>64.8</td>
</tr>
</tbody>
</table>

Source: Office for National Statistics

As can be seen from the map (Figure 6) there is significant variation in the conception rate at the local level. When analysing figures for areas with small populations, for example Rutland, it is important to also take into account the numbers involved, as a slight change when numbers are small can lead to large changes in the rate. Other population characteristics can also have an impact, for example, the ethnic composition of an area, the level of deprivation and educational attainment levels.
There has been widespread variation in the success of local authorities in reducing teenage conception rates since 1998, as can be seen in Table 6 (https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/birthsdeathsandmarriages/conceptionandfertilityrates/datasets/conceptionstatisticsenglandandwalesreferencetables/2014/conceptionstatisticstables2014final.xls).

10. Further information

More statistics on annual conceptions, in England and Wales (http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/conceptionandfertilityrates/datasets/conceptionstatisticsenglandandwalesreferencetables) for 2014 are available on our website.

For more information on data quality, legislation and procedures relating to conception statistics see Conceptions Metadata (https://preview.onsdigital.co.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/conceptionandfertilityrates/methodologies/conceptionsmetadata2014) and Conceptions Quality and Methodology Information document (http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/conceptionandfertilityrates/qmis/conceptionstatisticsqmi).

Quarterly Conceptions to Women aged under 18 (http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/conceptionandfertilityrates/datasets/quarterlyconceptionstowomenagedunder18englandandwales) provides provisional quarterly statistics on the number of conceptions to women aged under 18 by regions and other local authority areas within England and Wales.

There is an interactive mapping tool (http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dvc311/map/map.html) which enables trends in under 18 conceptions to be analysed at the local level for the years 1998 to 2014. This tool is accompanied by an article on under 16 and under 18 conceptions.

Conception statistics are subject to disclosure control to prevent the discovery of individuals at subnational levels of geography. Occasionally suppressing other areas is necessary to prevent disclosure by differencing. Disclosure of conceptions is in accordance with Department of Health practice in relation to the release of abortion statistics.

Annual abortion statistics (https://www.gov.uk/government/collections/abortion-statistics-for-england-and-wales) are published by the Department of Health. These statistics are based on date of occurrence, whereas ONS conception statistics are based on estimated date of conception.

Scottish conception figures (http://www.isdscotland.org/Health-Topics/Maternity-and-Births/Teenage-Pregnancy/) are available for women aged under 16, under 18 and under 20. In 2006 Information Services Division (ISD) Scotland introduced a new method of calculating teenage pregnancy information. The new methodology means that Scottish teenage pregnancy rates can be directly compared with the rates published for England and Wales.

In Northern Ireland, it is lawful to perform an operation for the termination of a pregnancy, where:

- it is necessary to preserve the life of the woman, or
- there is a risk of real and serious adverse effect on her physical or mental health, which is either long term or permanent

In any other circumstance it would be unlawful to perform such an operation. Due to the small numbers of abortions carried out in Northern Ireland each year, and in order to protect patient confidentiality, information on terminations of pregnancy is only released at Northern Ireland and HSC Trust level. Further information on the number of terminations of pregnancy carried out in Northern Ireland, can be accessed through the Department of Health, Social Services and Public Safety’s website (https://www.dhsspsni.gov.uk/articles/termination-pregnancy).

Further statistics on Births for England and Wales (http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths) are available on our website.

11. Background notes
1. Conception statistics include pregnancies that result in either 1 or more live births or stillbirths (a maternity) or a legal abortion under the Abortion Act 1967. They do not include miscarriages or illegal abortions. More information on this can be found in the Accuracy section of the Conceptions Quality and Methodology Information document (http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/conceptionandfertilityrates/qmis/conceptionstatisticsqmi).

2. In 1999, an amendment was made to the method for estimating the age at conception where the conception occurred in the same calendar month as the woman’s birthday. The new algorithm took account of the day of the mother’s birth and the estimated day of conception rather than just using year and month. The first data year to use this new algorithm was 1997. The amendment had a relatively small impact on the under 18 conception rate. The change was estimated to result in around a 2.6% decrease in the under 18 conception rate between 1987 and 1991. The impact on 1992 to 1997 was much smaller (around 0.6% decrease).

3. The date of conception is estimated using recorded gestation for abortions and stillbirths, assuming 38 weeks gestation for live births.

4. A woman’s age at conception is calculated as the number of complete years between her date of birth and the date of conception. In many cases her birthday will occur between conception and the birth or abortion; a woman may conceive, for example, at age 19 and give birth at age 20. The conception and birth may also occur in different calendar years. For these reasons the number of conceptions to women of a given age in a given year does not match the number of maternities and abortions to women of the same given age in the same given year.

5. The Human Fertilisation and Embryology Act (2008) contained provisions enabling 2 females in a same sex couple to register a birth from 1 September 2009 onwards. Abortion notifications also contain information about whether the woman was in a marriage or civil partnership (legal partnership for same sex couples). Due to relatively small numbers, conceptions to same sex marriage within a marriage or civil partnership (715 in 2014) are included with conceptions within marriage. Conceptions to same sex couples not in a marriage or civil partnership (364 in 2014) are included with conceptions outside marriage. Due to the relatively small numbers, the impact on the statistics is negligible.

6. Special extracts and tabulations of conception 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:
7. We would welcome feedback on the content, format and relevance of this release. Please send feedback to the postal or email address above.


9. National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference. 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
- 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.

12. Methodology

Conception Statistics QMI
(https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/conceptionandfertilityrates/qmis/conceptionstatisticsqmi)

Conceptions metadata 2014

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