Normal birth rates for England

Miranda Dodwell, a researcher for BirthChoiceUK and NCT research networker, analyses the latest normal birth rates for England.

Research shows that the majority of women want to give birth with a minimum amount of medical intervention, provided their baby is safe and they are coping with labour. But how likely are women to give birth without having any significant intervention?

Normal birth rates have been developed to provide women with this information. These show the proportion of women who give birth without any of the following medical procedures: induction, epidural or other anaesthetic, forceps, ventouse, caesarean or episiotomy. The voluntary organisation BirthchoiceUK has been given access to nationally collected data in the form of anonymised Hospital Episode Statistics (HES) records. This has enabled us to undertake a number of analyses that provide information about normal birth rates in England.

National normal birth rates
According to information collected nationally by NHS trust staff in England, in 2010-11 about four in ten women (42%) giving birth in obstetric units or in other NHS settings gave birth without any of the medical procedures listed above (see Table 1). For women having their first baby, the normal birth rate reduced to just 34% – meaning that almost two-thirds of first time mothers had some type of medical intervention. For second and subsequent babies, the normal birth rate was 49%.

Table 1: Summary of normal birth rates.
Source data: HES records

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<thead>
<tr>
<th>Normal birth rate for England 2010-11</th>
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<tr>
<td>For whole country</td>
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<tr>
<td>First time mothers</td>
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<td>Second+ time mothers</td>
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<tr>
<td>Higher-risk women</td>
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<tr>
<td>Low-risk women</td>
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<td>Highest maternity unit rate</td>
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<td>Lowest maternity unit rate</td>
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Approximately half of all women giving birth are considered to be at increased risk of complications, and these women are generally recommended to give birth in a hospital obstetric unit. Of these women at increased risk, on average only two in ten (20%) had a normal birth but this rate varied depending on the type of risk factor involved. For example only about four percent of women with a baby in a breech position had a normal birth, compared to over 30% of women with thyroid problems.

About half of all women giving birth in NHS settings are at low risk of complications. The normal birth rate for these women is about 60%, with the vast majority of these births taking place in obstetric units. Although not directly comparable, this figure aligns well with the findings of the Birthplace in England study where 62.2% of low-risk women planning birth in obstetric units had a normal birth.3

Local rates
Hospitals vary in their ability to send complete and accurate data to HES, and therefore we have done some data cleaning to identify and exclude maternity units that submit low-quality data that do not reflect the care they provide.

For hospitals providing data of adequate or good quality, there is a wide variation in normal birth rates in obstetric units across England, from 54% overall down to 29% according to the data submitted to HES.

There appear to be some regional differences in normal birth rates, with averages for Strategic Health Authorities (SHAs) varying between 40% in London and 47% in Yorkshire and Humber, including births in freestanding midwifery units. However, because there is a large variation between maternity units within SHAs around the country, and rates for units that submitted poor quality data are excluded, regional averages may not be meaningful.

Figure 1: Normal birth rates for maternity units by Strategic Health Authority (SHA) in England, 2010-11

Explanatory note: Each diamond on the figure represents a hospital site with an obstetric unit (OU), or with both an OU and an alongside midwifery unit (AMU). Results for an OU and an AMU on the same site are aggregated. Freestanding units are not shown. The sites are arranged by region and the diamond is placed on the line according to the unit’s rate of ‘normal births’. This is a process measurement designed to show how labour is managed in different settings. It indicates the extent to which women are able to give birth without the aid of medical interventions.

Source data: HES records 2010-11. Figure copyright, BirthChoiceUK 2012.
Some of the variation in rates will be due to socio-demographic factors, such as maternal age, ethnicity or social deprivation of women giving birth. In addition some of the variation may result from inaccurate recording of information by the trusts, despite our data cleaning methods.

However, some of the variation in local maternity rates is likely to be due to differences in the structure and quality of maternity care that women receive. Research shows that a number of practices recommended in national guidelines and policy can increase normal birth rates in NHS settings. These include:

1. Providing the opportunity to give birth in a midwife-led unit, either alongside or free-standing.
2. Providing continuity of care from a small number of midwives during pregnancy and labour.
3. Ensuring women have one-to-one care during established labour.
4. Supporting the use of natural and low-tech comfort aids during labour, such as the use of water, or encouraging the use of upright positions and mobility.

Because of this, normal birth rates can be seen as a measure of the quality of maternity care that women experience. Researchers at BirthChoiceUK are currently working to ascertain how much variation is due to such differences in maternity care.

**Trends over time**

Due to a change in methodology in analysing mode of delivery and anaesthetic data in 2006-07, it is not possible to have a continuous trend of normal birth rates. BirthChoiceUK has been able to analyse data on a consistent basis from 2004-05 to 2010-11 that shows a normal birth rate of about 42% throughout this period. Although earlier figures are not directly comparable, rates have dropped significantly from those seen in the 1990s, due to increases in interventions such as caesareans, instrumental deliveries and inductions.

**Where to find normal birth rates**

Although normal birth rates were published by the NHS Information Centre for the years 2003 to 2006, the information is no longer published by them as they consider there to be no clear definition of ‘normal birth’. This is despite the published work of the Maternity Care Working Party, which sets out clearly a consensus definition of normal birth, agreed by the RCOG, RCM, NCT and other interested parties. BirthChoiceUK is in discussion with the Information Centre to have this important statistic reinstated as part of national maternity statistics.

In the meantime, normal birth rates for maternity units in England can be found on the BirthChoiceUK website, alongside other maternity statistics, at www.birthchoiceuk.com/Access.htm. More information on national trends can be found at www.birthchoiceuk.com/Professionals/PDFs/Normalbirth2010_11.pdf. The HES records from which data in this article have been derived are subject to copyright of the Health and Social Care Information Centre.

**References**


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**Figure 2: Trends for normal birth rates in England 1990-2011.**

Explanatory note: A new methodology for analysing and presenting maternity data was introduced by the Health and Social Care Information Centre in 2007 which affected the calculation of normal birth rates. Both methodologies were used for the years 2004-05 and 2005-06 to show the effect of this change.

Source data: HES records. Figure copyright: BirthChoiceUK 2012