

# A summary picture of Children & Young People in Birmingham: Conception to Birth

This document provides a summary of the key facts and figures from conception to birth. For detailed information on a wider range of data (including sources), please see the JSNA Conception to Birth dashboard.

Click this [link](#) to access the JSNA Conception to Birth Dashboard.



The average number of babies born per woman is less than the number needed to maintain population levels, but this is similar both regionally and nationally. On average, women in the city have their first baby when they are 31 years old but 1 in every 125 babies are born to teenage mothers. Almost half (45%) of under 18s conceptions lead to abortion.



Across the three maternity trusts in the city, almost 4,000 pregnant women presented with complex social issues at their antenatal booking. Around 8% of pregnant women smoke at the beginning of their pregnancy.



Significantly more babies are stillborn or die within the first 28 days of life, or before their first birthday in Birmingham compared to the national average. More babies are born prematurely, and term babies are more likely to be a low weight at birth.

## How have birth rates changed?

Almost 15,000 babies were born in the city in 2021, a decrease of 3.4% compared to the previous year. The general fertility rate (GRF, the number of live births per 1,000 women of childbearing age, 15-44, inclusive) has been on a downward trend for several years, falling from 69 per 1,000 in 2016 to 56 per 1,000 in 2021.

## How are birth rates expected to change in the future?

Population projections from Office for National Statistics (ONS) predict a 1% rise in Birmingham births from 2023 until 2035, equating to 17,191 births in 2035. However, actual live births in Birmingham have been lower than ONS projections since 2018, mirroring the national picture. The decline in Birmingham is slower than the national decline, and fertility in Birmingham remains significantly higher than in England. The total fertility rate (average number of children born to a female over their lifetime) in Birmingham has declined steadily from 2.0 in 2016 to the current rate of 1.7, which is lower than the replacement rate (2.1). Replacement fertility is the rate at which women give birth to enough babies to sustain current population levels.

## How does the number of births vary across the city?

There is considerable variation in the General Fertility Rate across wards, with the highest rates per 1,000 women the following wards: Bordesley Green (91.0); Heartlands (89.1); Alum rock (87.3), and the lowest in Bournbrook & Selly Park (15.2); Edgbaston (21.2); Ladywood (31.9). More than three-quarters (77.6%) of births in 2020 were to women living in the three most deprived deciles, with more than half (51.8%) being from decile 1, the most deprived.

## How old are mothers when they give birth?

The average age of women delivering their first child has, increased slightly from 30.2 years in 2014, to 30.9 years in 2021. Pregnancy at the high and low ends of childbearing age are considered more at risk for adverse outcomes - in 2021 there were 65 births to mothers aged 45 and over, and 448 births to mothers under 20 years.

Between 2016-2021, 1 in every 125 births (or 0.8%) was to a teenage mother (aged under 18 years) which is not significantly different to England. There is however considerable variation across wards for births to teenage mothers, with Heartlands being highest with 1 in every 34 births (2.9%). Many wards had no deliveries to teenage mothers.

## How many pregnancies end in abortion?

In 2021, 5,582 women in Birmingham had an abortion. This is 21.5 abortions per 1,000 females of childbearing age, which is significantly higher than England. The trend is increasing and getting worse. Almost half of under 18 conceptions ended in abortion (45%) and 32% of abortions among women aged under 25 are repeat abortions.

## Do pregnant women access early antenatal care?

Early initiation of antenatal care is strongly recommended to maintain maternal and foetal wellbeing. The percentage of women who received an early antenatal booking varied across trusts, with 60.0% attending their first appointment at  $\leq 70$  days gestation at University Hospitals Birmingham NHS Foundation Trust (UHB), 51.1% at Birmingham Children's and Women's NHS Foundation Trust (BCW), and just 29.0% at Sandwell and West Birmingham Hospitals NHS Trust (SWB).

## What risk factors do pregnant women present with?

- **Smoking:** Across the three maternity trusts, 8.1% of women (1,650) were recorded as smokers at the time of their antenatal booking in Birmingham. This is highest for University Hospitals Birmingham NHS Foundation Trust, however recording of smoking status is higher here than the other trusts so may reflect better recording rather than a difference in prevalence. Due to differences in recording a direct comparison with the England average may not be accurate, but smoking prevalence nationally among pregnant women is recorded as 6.86%. It is not possible to directly compare the percentage of smokers at booking with percentage of smokers at delivery due to different geographies, however 8.5% of women smoke at the time of delivery which is significantly better than the England average.

- **Complex Social Factors:** Vulnerable women often have multiple needs and may experience a number of complex social factors at the same time which place them and their unborn babies at additional risk and increase need of support. These include things like poverty, substance misuse, domestic abuse and homelessness. In 2020-21, across the three maternity trusts almost 4,000 pregnant women presented with complex social issues at their antenatal booking. This is highest in Sandwell and West Birmingham Hospitals NHS Trust where almost 1 in 4 women (23.9%) had complex social factors recorded. All three trusts had higher proportions of women with recorded complex social factors at antenatal booking compared to England (11.8%)

### What is the ethnicity of Birmingham mothers and how well is this recorded?

The majority of women using maternity services are from minority ethnic groups (52.2%) which is reflective of the diversity in our population. There are significant ethnic inequalities in maternal mortality and outcomes such as stillbirth, low birthweight and prematurity, and accurate recoding of ethnicity is the first step in understanding why these inequalities exist and to ensure appropriate care. However how well ethnicity is recorded varies by maternity trust and for University Hospitals Birmingham NHS Trust, this is not recorded for over 20% of women.

### What percentage of babies are born with low birth weight or prematurely?

In 2021, 461 babies were born at term ( $\geq 37$  weeks) with a low birth rate ( $< 2,500$ g), 3.5% of all live births in Birmingham., On average 988 babies are born prematurely each year, equating to around 8.7% of all live births (between 2018 and 2021, there were 3,951 babies born prematurely). The highest rates of low birth weight babies ( (five year pooled 2016-2020) were found in the following wards: Holyhead (13.3%); Garretts Green (12.2%); Yardley West & Stechford (11.2%). Very low birth weight, a subset of low birth weight is a recorded birth weight of  $< 1,500$ g and is a major factor in infant mortality. The very low birth weight rate in Birmingham is 1.8%, which is significantly higher than England (1.0%).

### What proportion of babies are born via Caesarean delivery?

In the three-month period ending in August 2022, there were 4,730 deliveries in Birmingham by caesarean section, equating to 41.0% of all deliveries, not significantly different to the rates in England (37.4%)

### How many babies are breastfed and have skin to skin contact during the first hours after birth?

In 2020/21, 71.5% of babies born in Birmingham received breastmilk as their first feed – similar to England (71.7%) Skin-to-skin contact following delivery is recommended to promote breastfeeding and maternal bonding. In August 2022, BCW recorded 55.5% of term births had skin-to-skin contact within one hour of birth, lower than the rate for England (60.9%). The rates at SWB and UHB were 65.4% and 63.5% respectively.

## What is the prevalence of neonatal mortality, infant mortality & stillbirth?

In 2020, 151 babies born in Birmingham were either stillborn, or died before they were four weeks old. This equates to 10 babies in every 1,000 born during the year. This is significantly worse than the England average (6.5 in every 1,000). There has been no significant change in the trend over the past five years in Birmingham, compared to a decreasing trend nationally, and the neonatal and stillbirth mortality rate has been significantly higher than the England average for the last two decades.

National evidence shows that there are significantly higher rates of stillbirth and infant mortality in deprived populations compared to the population as a whole, and higher rates among Black African, Black British, Pakistani, Bangladeshi heritage families. This is important in understanding what is happening in Birmingham as there is a significant level of deprivation in the city, with over half of all babies born to mothers in areas in the City which are considered to be in the top 10% most deprived nationally and the population is super-diverse. Birmingham has one of the highest infant mortality rates in the country, with 7 in every 1,000 babies dying before their first birthday. In some wards in Birmingham this is more than double. These are Nechells (14.08), South Yardley (14.08) and Pype Hayes (14.05). The rate is higher than the England average (3.9%) in 73.9% of Birmingham wards.