

A summary picture of conception to birth in Birmingham

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

The period from conception to birth lays the foundation for lifelong health and wellbeing, making it a priority area for public health planning and intervention. This chapter explores the factors influencing maternal and infant health in Birmingham, identifying the needs, challenges, and opportunities for improving outcomes.

Population

Birmingham is a predominantly young city. Just over half the population (51%) are aged under 35 years, and around a quarter (25%) are children. Whilst Office for National Statistics population projections predict a 1% increase in births each year from 2023 to 2035, actual births are below the projected rate, mirroring the national picture. The number of babies born in Birmingham has been declining in recent years, falling by 10.5% between 2018 and 2023.

Life expectancy

Babies born in Birmingham are likely to live shorter lives than the England average, with average life expectancy at birth being almost 2 years shorter for females and 2.5 years shorter for males. Life expectancy at birth varies hugely across the city, with residents of Sutton Four Oaks having the longest life expectancy in the city (86.4 for females; 82.9 for males), and residents in Bordesley having the shortest (77.9 for females; 72.1 for males).

Demographics

Ethnicity & country of origin

Reflecting our super-diverse population, around two thirds (61%) of Birmingham births are to mothers from ethnic minorities. This is more than double the England average of around 28%. Excluding the UK, the most common country of origin for mothers giving birth in Birmingham is Pakistan, followed by India, Nigeria, and Bangladesh. There is clear geographical variation in the number of births to mothers born outside of the UK, consistent with settlement patterns in Birmingham over time (Figure 1).

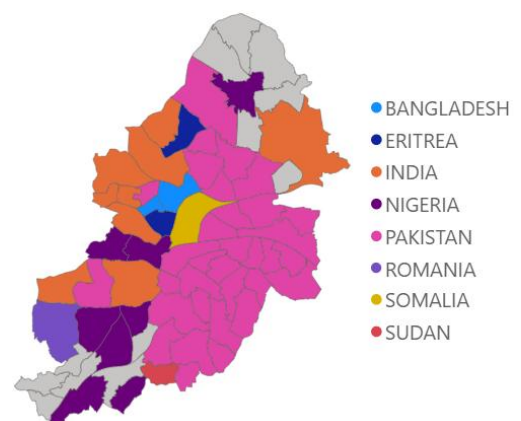


Figure 1: most common countries of origin (excluding UK) of mothers giving birth in Birmingham by ward, 2023

Age of mother

The average age of first-time mothers in Birmingham is 31 years, similar to the average in England. Recent trends show the average age at which women have their first child has been steadily rising nationally, regionally, and locally.

Deprivation

More than half (51%) of all Birmingham births are to mothers who live in the most deprived areas of the city. As deprivation decreases, so does the relative number of births, reflecting smaller overall populations, older age structures, and lower birth rates in more affluent areas - less than 1% of Birmingham births are to mothers living in the least deprived areas of the city.

Fertility

Crude birth rate

The crude birth rate is 12.2 per 1,000 population in Birmingham, higher than the England rate of 9.8 per 1,000. The crude birth rate provides a broad picture of fertility and helps track population trends. In Birmingham, the crude birth rate has been declining in recent years, with England and the West Midlands showing similar trends. This has prompted concerns about an aging population and potential challenges in supporting an older demographic with fewer working-age individuals.

General fertility rate

The general fertility rate in Birmingham is 54.1 per 1,000 women of child-bearing age (15-44 years), higher than the England rate of 49.9 per 1,000. In contrast to the crude birth rate, the general fertility rate focuses only on women within typical reproductive age range, which makes it a more accurate reflection of fertility patterns than the crude birth rate. The general fertility rate in Birmingham has decreased by around 22% since 2016, with England and the West Midlands showing similar patterns.

Total fertility rate

The total fertility rate is the average number of children born to a female over their lifetime. A rate of 2.1 is known as the replacement rate, which is the total fertility rate at which women give birth to enough babies to sustain population levels. The total fertility rate in Birmingham is 1.7, higher than the England rate of 1.4. Total fertility rates have been consistently below the replacement rate in recent years and there is a long-term trend of decreasing rates nationally, regionally, and locally.

Teenage pregnancy

Teenage conceptions and deliveries

Conception rates in under 16s and under 18s in Birmingham are similar to those in England. For females aged under 16 in Birmingham, there are around 2 conceptions per 1,000 girls (aged 13-15 years) and in under 18s, there are around 13 conceptions per 1,000 girls (aged 15-17 years).

In the period 2016/17-2020/21, there were 625 deliveries to teenage mothers (aged 12-17 years), representing less than 1% of all Birmingham births. Of the 69 Birmingham wards, 62 had more teenage births than the national average during this period, with some wards having 3-4 times as many teenage births (Heartlands, 2.9%; Castle Vale, 2.3%). More than half (35) of all Birmingham wards had birth numbers too low to publish (≤ 5), shown in the grey areas in figure 2.

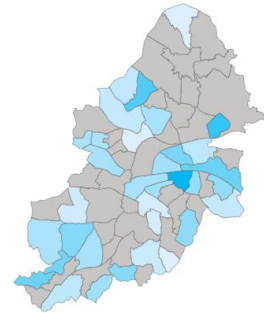


Figure 2: deliveries to teenage mothers by ward, 2016/17-2020/21

Abortion rates

The total abortion rate in Birmingham is 22.1 per 1,000 females (aged 15-44 years), significantly higher than the England average of 19.2 per 1,000. In 2021, there were 5,582 procedures carried out in Birmingham. Almost half (45%) of all conceptions in under 18s in Birmingham led to an abortion, lower than the England average of 53%. Around 32% of abortions in young women aged under 25 years were repeat abortions in Birmingham (647 procedures), significantly higher than the England average of around 30%.

Antenatal Care

Early antenatal care

Across all three Birmingham trusts, around 54% of pregnant women complete their early antenatal booking (within the first 70 days of pregnancy). This is lower than the England average of 60%. Of the three trusts, only University Hospitals Birmingham NHS Foundation Trust exceed the England average, with 65% of pregnant women completing their early antenatal booking.

Complex social needs

Overall, around 20% of pregnant women present with one or more complex social need in Birmingham trusts, higher than the England average of 12%. In 2023-24, Sandwell & West Birmingham Hospitals NHS Trust had the largest proportion, where 25% of pregnant women had complex social needs, more than double the national average.

Perinatal Mental Health

The access rate to specialist perinatal mental health services is lower in Birmingham than England. In the period 2020/21-22/23, there were 2,910 people who attended at least one contact with specialist community perinatal mental health services in Birmingham. The estimated prevalence of perinatal mental health conditions in Birmingham was 27.9% in 2019, significantly higher than the England average of 25.8%.

Smoking at antenatal booking

Around 9.4% of pregnant women are recorded as current smokers at their antenatal booking in Birmingham trusts, lower than the England average of around 10.5%. Of the three Birmingham trusts, University Hospitals Birmingham NHS Foundation Trust recorded the largest proportion, with 11% of pregnant women presenting as current smokers.

Reproductive Health

In 2023-24 there were 285 admissions for ectopic pregnancies and 755 for Pelvic Inflammatory Disease (PID). Both are significantly higher than the England average.

Birth

Low birth weight

Around 4% of full-term babies are born in Birmingham with a low birth weight (less than 2,500 grams), significantly higher than the England average of 3%. In 2022, this was equivalent to 539 low birth weight babies born in Birmingham. In the period 2016-2020, the largest proportions of low birth weight babies were born in the following wards: Holyhead (13%), Garretts Green (12%), and Yardley West & Stechford (11%). Only two wards in Birmingham had lower proportions of low birth weight babies than the England average of 6.8%.

Very low birth weight

Of all births in Birmingham, almost 2 in every 100 babies (1.8%) are born with a very low birth weight (less than 1,500 grams), significantly higher than the England average of 1.0%. In 2022, this was equivalent to 264 babies born in Birmingham.

Premature births

Premature births are also significantly higher in Birmingham than in England. In the period 2020-22, there were 3,728 premature births, equivalent to a rate of 84 per 1,000 births in Birmingham, significantly higher than the England average of 77 per 1,000 births.

Caesarean deliveries

In Birmingham, almost 40% of babies are delivered by caesarean section, slightly lower than the England average of 41%. In recent years the trend for caesarean deliveries has been increasing nationally, regionally, and locally.

First Hours

Skin-to-skin contact

Across all three Birmingham trusts, around 68% of new mothers have skin-to-skin contact with their babies within one hour of birth, slightly higher than the England average of 67%.

First feed

Around 72% of babies born in Birmingham receive breast milk as their first feed, in line with the England average of 72%. In 2023-24, this was equivalent to 9,310 babies.

Loss

Stillbirth

In the two year period, 2021-2023, there were 242 stillbirths in Birmingham. This is 5.6 babies in every 1,000 births, significantly higher than the England average of 4.0 per 1,000 births.

Neonatal mortality

In the period 2021-23 in Birmingham, 291 babies died before they were 4 weeks old. This is 6.7 babies per 1,000 live births, significantly higher than the England average of 3.0 per 1,000

Infant mortality

In the period 2021-23 in Birmingham, 361 babies (who had lived to 28 days) died before their first birthday. This is 8.4 in every 1,000 live births and is more than double the national average of 4.1. Infant mortality in Birmingham has been significantly higher than the national average for the last 20 years.

Of the 69 Birmingham wards, 59 have higher rates of infant mortality than the England average. In the period 2019-23, the wards with the highest infant mortality rates were Ward End (14.6), Heartlands (14.0) and Newtown (13.4). In these wards, along with Lozells, Nechells, and North Edgbaston, infant mortality was more than 4 times the national average, shown in the darkest areas of Figure 3.

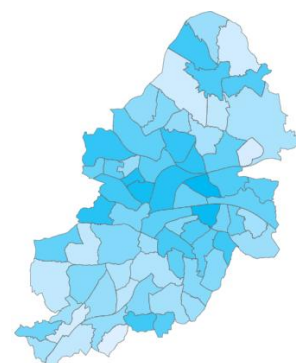


Figure 3: infant mortality by ward, 2019-23

To address the high levels of infant mortality in Birmingham, the Infant Mortality Action Committee (IMAC) was established in 2021, reporting to the Integrated Care Board. Their work includes pre-conception, infancy, engagement and involvement, and research. Prevention is integral to the work. In addition, work through the Local Maternity and Neonatal System, Healthy Start, Family Hubs, Healthy Schools programme (including healthy relationships and genetics), pre-conception community work and improving the postnatal contraception offer aims to contribute to reducing infant mortality. The Child Death Overview Panel (CDOP) reviews the death of every child residing in Birmingham, collecting data of children who die from birth to 18 years old, regardless of gestation, including those born so prematurely that they could not possibly survive.