Llywodraeth Cymru
Welsh Government

STATISTICS

Maternity and birth statistics: 2022

Statistics from antenatal, birth, and child health records including smoking during pregnancy, breastfeeding and birthweights for children born in Wales in 2022.

First published: 9 August 2023

Last updated: 9 August 2023

Contents

Introduction

The purpose of this release is to provide a statistical overview of maternity and births in Wales including analyses of mothers' characteristics. The statistics are used to inform **Welsh Government's maternity policy development** and all data tables are published on **StatsWales**.

The primary data source for the number of births in Wales is published by the Office for National Statistics (ONS), which counts birth registrations. However, this release focusses on statistics for births using data sourced from Maternity Indicators dataset (MI ds) and the National Community Child Health Database (NCCHD). These sources align closely to the ONS data but have a wider range of data items to analyse compared to the ONS data.

The Maternity Indicators dataset combines a child's birth record with their mother's initial assessment record (where possible). There are some data quality issues with certain data items in this dataset which are highlighted throughout the release and explained in more detail in the **quality report**.

The National Community Child Health Database consists of anonymised records for all children born, resident or treated in Wales and born after 1987. The database combines data from local Community Child Health System databases which are held by local health boards.

Breastfeeding statistics are published in a separate annual release, which were last published on 26 July 2023.

Main points

Summary of statistics from antenatal care

The percentage of pregnant women receiving their initial assessment by their 10th completed week of gestation decreased by four percentage points in 2022. The percentage was lower for women in the youngest and oldest age groups.

Three out of ten pregnant women reported a mental health condition at initial assessment. This proportion has increased every year since data was first collected in 2016. Younger pregnant women were more likely to report a mental health condition than older pregnant women.

The percentage of pregnant women from Mixed ethnic backgrounds and White ethnic backgrounds reporting a mental health condition was more than three times higher than pregnant women from Black or Asian ethnic backgrounds.

Close to a third of pregnant women were classed as obese by their BMI score at initial assessment. This proportion has increased every year since data was first collected in 2016 and was similar for all age groups between 20 to 24 and 45 or older.

The percentage of obese pregnant women at initial assessment from Black or White ethnic backgrounds was close to double the percentage of obese pregnant from Asian backgrounds.

Just over a quarter of all women gained the recommended amount of weight during pregnancy, based on their BMI group at initial assessment.

The percentage of pregnant women recorded as smokers at initial assessment and birth decreased slightly in 2022 to their lowest levels on record. Just over a quarter ‘stopped smoking’ between their initial assessment and birth, also the

highest on record. However, since the COVID-19 pandemic, smoking data has been almost entirely self-reported rather than tested through a carbon monoxide test, which may partly explain the reduction in smoking rates.

Smoking rates at both initial assessment and birth decreased as the mother's age group increased. Rates were also markedly higher in mothers from White and Mixed ethnic backgrounds, with very few mothers from Black or Asian backgrounds recorded as smokers.

Summary of statistics for labour and births

Just fewer than half of labours began spontaneously in 2022, continuing the longer-term downward trend.

An epidural was administered in just fewer than a quarter of all deliveries, which was broadly similar to the past three years.

Just over a third of babies were delivered via caesarean section, the highest percentage on record. Of all deliveries, one in five arrived via emergency caesarean section and close to one in seven arrived via elective caesarean section.

The number of live births decreased to its lowest number since broadly comparable records began in 1929. In 2022, there were 15% fewer singleton live births and 39% fewer multiple (twins and triplets) births than there were ten years prior.

Almost 9 out of 10 births were from White ethnic backgrounds, but this percentage has decreased by 2 percentage points from five years ago. The percentage of births from Black and Asian ethnic backgrounds has increased by 0.8 and 0.6 percentage points respectively, over the same period.

The percentage of younger mothers birthing in the year continued to fall, and just over half of all mothers birthing in the year were aged 30 or older. There were more mothers birthing aged between 35 and 39 than there were aged 20 to 24 for the second year in a row.

Close to one in fifty births were at home in 2022, the lowest proportion of home births since 2002.

Close to one in twelve births arrived pre-term. This proportion has been largely unchanged for the past seven years.

The percentage of low birthweight babies increased slightly to 6.1%. While there are year-to-year variations, this percentage has been on a marginal upward trend over the past eight years. A slightly higher percentage of female babies had low birthweights than males.

The average birthweight for a singleton birth was a little more than one kilogram heavier than a multiple birth.

Just over half of births at gestations between 32 and 36 completed weeks had low birthweight, compared to 3% of births at gestations between 37 and 41 completed weeks.

While it is expected that a higher percentage of births from Asian ethnic backgrounds would have low birthweight compared to other ethnic groups, the percentage of low birthweight babies from Asian backgrounds increased to its highest rate on record, while rates for all other ethnic groups remained broadly in line with longer-term trends.

Antenatal care

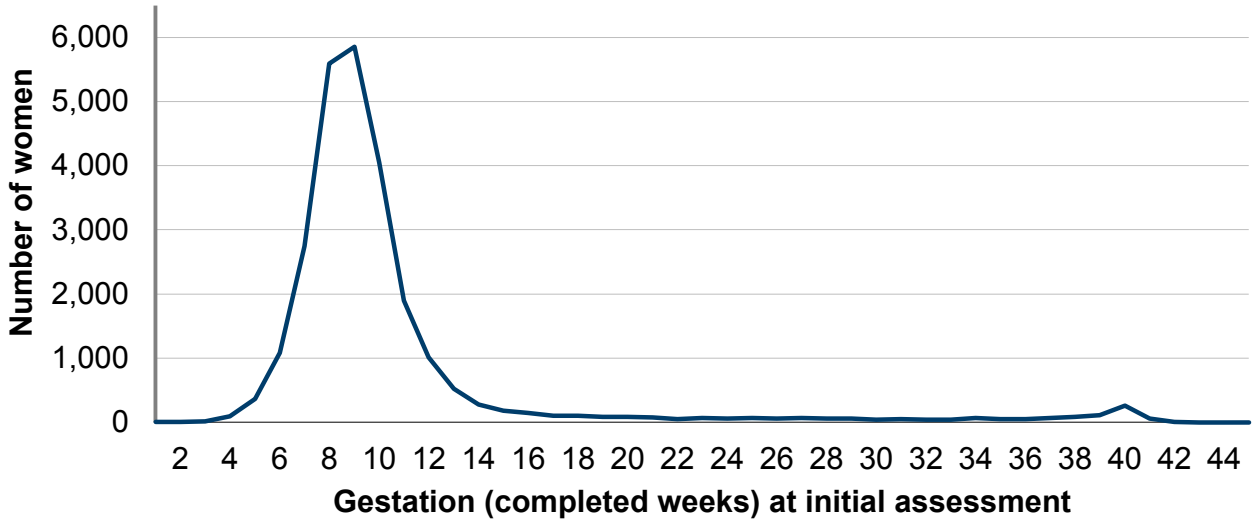
Statistics presented in this section are based on the 26,565 initial assessment

records (or pregnancies) included in the Maternity Indicators dataset in 2022.

Initial assessments by gestational age

Early access to maternity services increases the opportunity to promote and improve the health and well-being of pregnant women through early signposting to appropriate services and information. It is an aim that all pregnant women should have their initial assessment by the 10th completed week of gestation.

Figure 1: Number of women having their initial assessment by week of gestation, 2022 [Note 1]



Description of Figure 1: A line chart showing the large majority of initial assessments took place between 6 and 12 completed weeks gestation.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Number and percentage of women who had an initial assessment carried

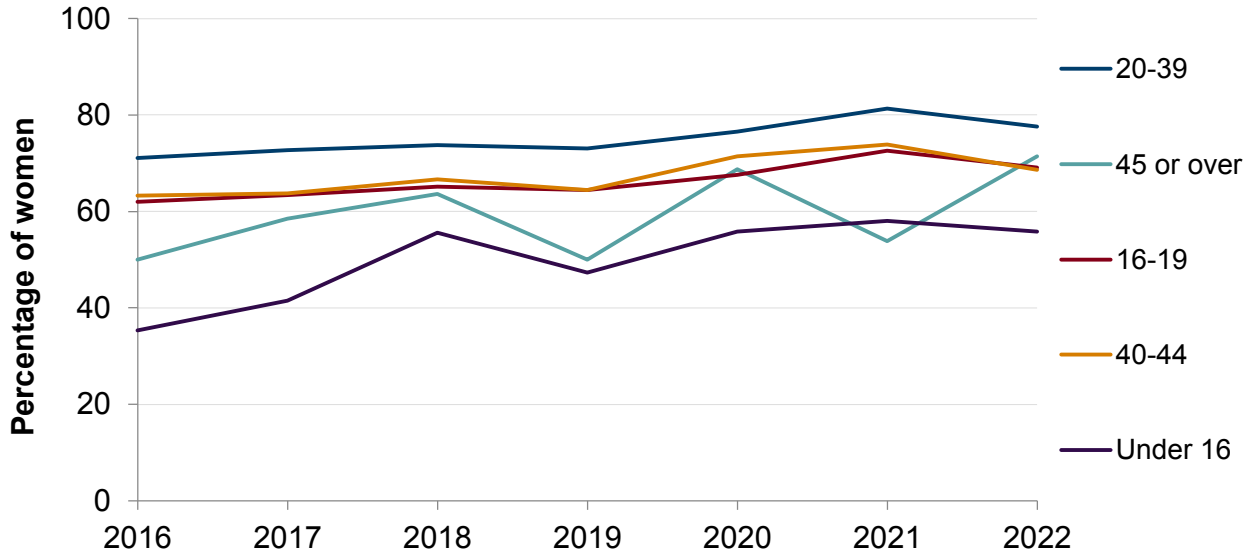
out by 10 completed weeks of pregnancy, by health board providing the service (StatsWales)

[Note 1] Records with invalid or missing data for gestation at initial assessment are not included. In 2022, there were 821 records with missing or invalid data for this data item.

In 2022, at least 77% of pregnant women received their initial assessment with maternity services by the 10th completed week of pregnancy or earlier. This had been on a slight upward trend but was is four percentage points lower than in 2021.

There are some data quality issues with this data item which are explained in the **quality report**.

Figure 2: Percentage of women who had an initial assessment by 10 completed weeks of pregnancy, by age of woman, 2016 to 2022 [Note 1]



Description of Figure 2: Line chart showing the percentage of pregnant women who had an initial assessment by 10 completed weeks of pregnancy was highest for women aged between 20 and 39, but lower for women in the younger and older age groups.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Initial assessment indicators for Wales, by mother's age (StatsWales)

[Note 1] The percentages are based on all records with valid data recorded for gestational age at initial assessment and mother's age. In 2022, there were 821 records with no stated for either of these data items.

78% of women aged between 20 and 39 received an initial assessment with maternity services by the end of the 10th completed week of pregnancy. This was the highest percentage for any age group.

Close to seven out of ten pregnant women aged 16 to 19, or 40 and over received their initial assessment by the 10th completed week of pregnancy, while the rate was lowest (56%) for pregnant women aged under 16.

The percentage of pregnant women receiving their initial assessment had been on an upward trend for all age groups, until 2022 when the percentage decreased for women in all age groups apart from those aged 45 and over.

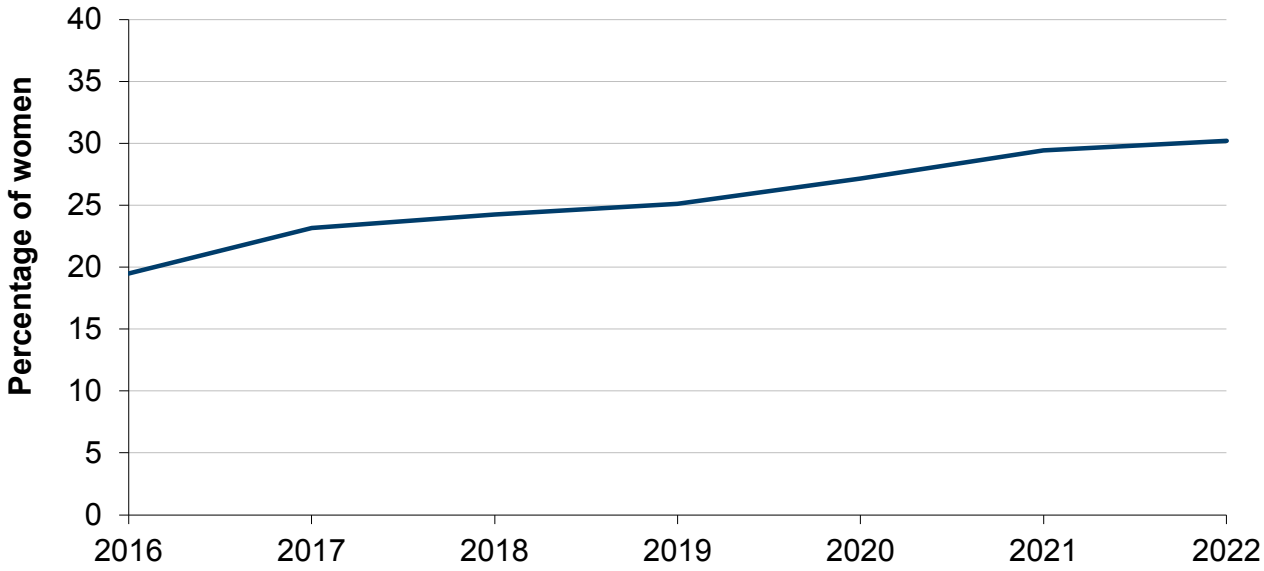
As there are few (less than 100) pregnant women aged under 16 and 45 or over, there may be large year-to-year changes due to natural volatility.

Mental health

At their initial assessment, pregnant women are asked to self-report any mental health conditions they suffer from, when completing their All-Wales Maternity Record in consultation with their midwife. The conditions listed on the Record

are: puerperal psychosis (severe postnatal depression); bi-polar effective disorder/manic depression; psychosis; psychotic depression; schizophrenia; and other.

Figure 3: Percentage of women who reported a mental health condition at initial assessment, Wales, 2016 to 2022 [Note 1] [Note 2]



Description of Figure 3: A line chart showing the percentage of women who reported having a mental health condition at initial assessment has increased every year between 2016 and 2022.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Number and percentage of women at initial assessment who had reported a mental health condition, by health board providing the service (StatsWales)

[Note 1] The percentages are based on all records with valid data recorded for mental health condition at initial assessment. In 2022, there were 696 records

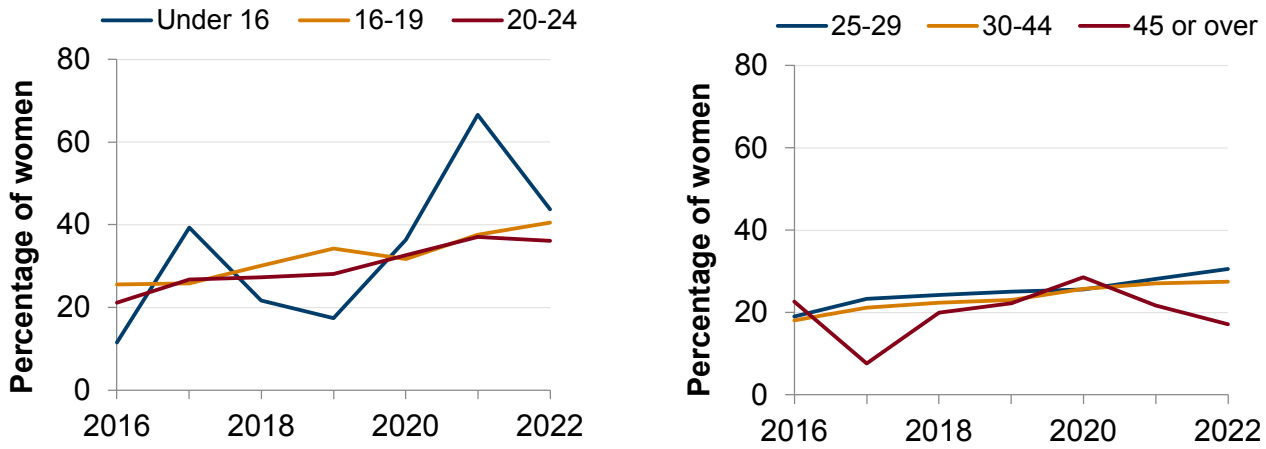
with missing or invalid data for this data item.

[Note 2] Wales percentage excludes all records from Betsi Cadwaladr and Cwm Taf/Cwm Taf Morgannwg health boards because mental health data recorded in these two health boards is of low reliability for all seven years.

Three out of ten (30%) pregnant women reported a mental health condition at their initial assessment in 2022. This is an increase of two percentage points from the previous year, and an increase of eleven percentage points from 2016 (first year of comparable data).

There are some data quality issues with this data item which are explained in the **quality report**.

Figure 4: Percentage of women who had reported a mental health condition at initial assessment, by age of mother, Wales, 2016 to 2022 [Note 1] [Note 2]



Description of Figure 4: Line charts showing that the percentage of pregnant

women who reported mental health conditions varies by age group, with a higher proportion of conditions reported in younger age groups.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Initial assessment indicators for Wales, by mother's age (StatsWales)

[Note 1] The percentages are based on all records with valid data recorded for mental health condition at initial assessment and mother's age. In 2022, there were 696 records with missing or invalid data for either of these data items.

[Note 2] Wales percentage excludes all records from Betsi Cadwaladr and Cwm Taf/Cwm Taf Morgannwg health boards because mental health data recorded in these two health boards is of low reliability for all seven years.

While there are year-to-year fluctuations, the longer-term trend shows the percentage of pregnant women reporting a mental health condition has been increasing in most age groups.

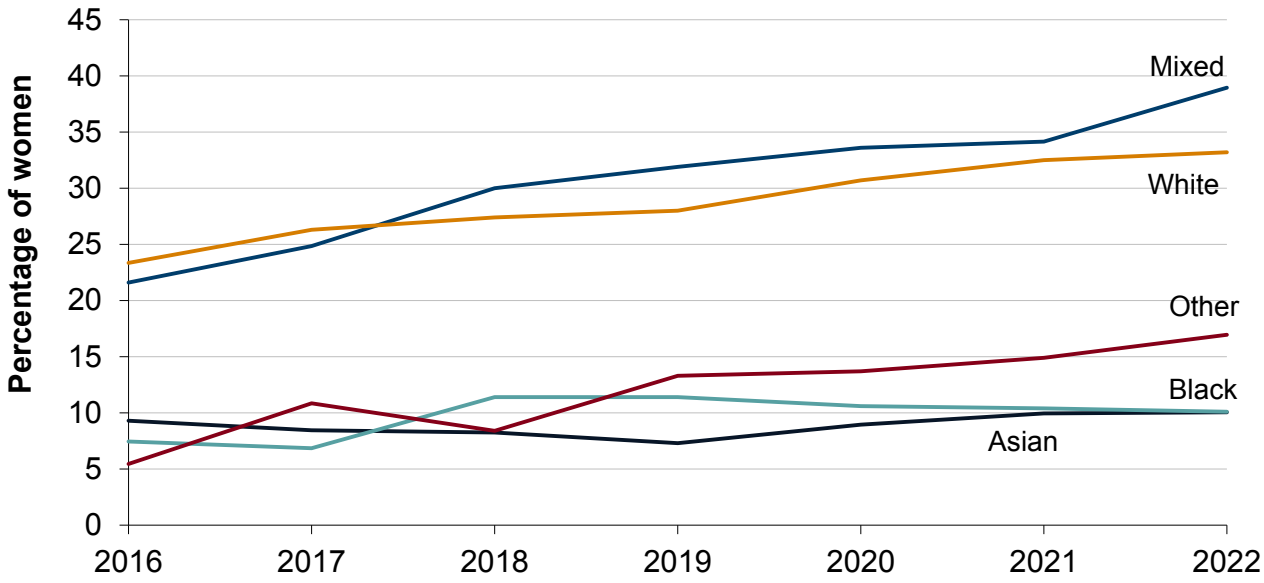
In 2022, there was a clear trend for a higher proportion of pregnant women to report a mental health condition in younger age groups than in older age groups.

Four in ten (40%) of pregnant women in the 16 to 19 age group reported a mental health condition and a third (36%) of women in the 20 to 24 age group reported a mental health condition. The proportion fell to three in ten (31%) of pregnant women aged 25 to 29, and to a little over a quarter (27%) for women aged between 30 to 44.

As there are few (less than 100) pregnant women aged under 16 and 45 or over, there may be large year-to-year changes due to natural volatility in these age groups.

Figure 5: Percentage of women who reported a mental health

condition at initial assessment by ethnic group, 2016 to 2022 [Note 1] [Note 2]



Description of Figure 5: Line chart showing that the percentage of pregnant women who reported a mental health condition varies widely by ethnic group. The percentage for women from Mixed ethnic groups was nearly 4 times higher than women from Black and Asian ethnic groups in 2022.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Number and percentage of women at initial assessment who had reported a mental health condition, by ethnic group (StatsWales)

[Note 1] The percentages are based on all records with valid data for mental health condition at initial assessment and mother's ethnic group in the five reporting health boards. In 2022, there were 4,302 records which had invalid or missing data for these data items.

[Note 2] Wales percentage excludes all records from Betsi Cadwaladr and Cwm

Taf/Cwm Taf Morgannwg health boards because mental health data recorded in these two health boards is of low reliability for all seven years.

In 2022, four in ten (39%) pregnant women from Mixed ethnic groups reported a mental health condition and a third (33%) of women from White ethnic groups reported a mental health condition at their initial assessment. The percentage of pregnant women from both ethnic groups reporting a mental health condition has followed a similar upward trend since data was first collected in 2016. The percentage has also been markedly and consistently higher than in the three other ethnic groups.

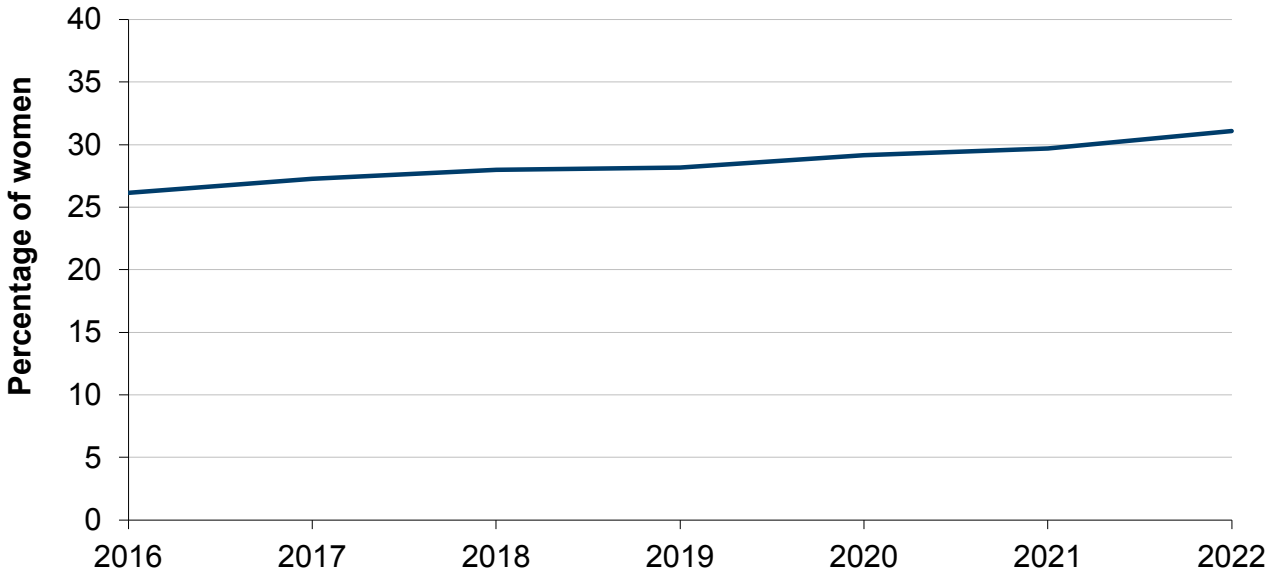
One in six (17%) pregnant women from Other ethnic groups reported a mental health condition. This percentage has increased in every year since 2018.

One in ten (10%) pregnant women from both Asian and Black ethnic groups reported a mental health condition. This percentage is unchanged for both ethnic groups compared to the previous year and both ethnic groups have a broadly stable trend since 2016.

Obesity

At their initial assessment, pregnant women have their height and weight measured and their Body Mass Index (BMI) is calculated. A person with a BMI of 30 or greater is considered obese, and obesity increases the risk of many health complications during pregnancy.

Figure 6: Percentage of women who had a BMI of 30+ at initial assessment, 2016 to 2022 [Note 1]



Description of Figure 6: Line chart showing a steady increase in the percentage of women with a BMI of 30 or more between 2016 and 2022.

Source: Maternity Indicators dataset, Digital Health and Care Wales

BMI at initial assessment, by health board providing the service (StatsWales)

[Note 1] The percentages are based on all pregnant women with valid data recorded for height and weight at initial assessment, who had their initial assessment at 14 completed weeks of gestation or earlier. In 2022, 23,541 pregnant women had their initial assessment by 14 weeks gestation, and of these 589 had missing or invalid data recorded for these data items.

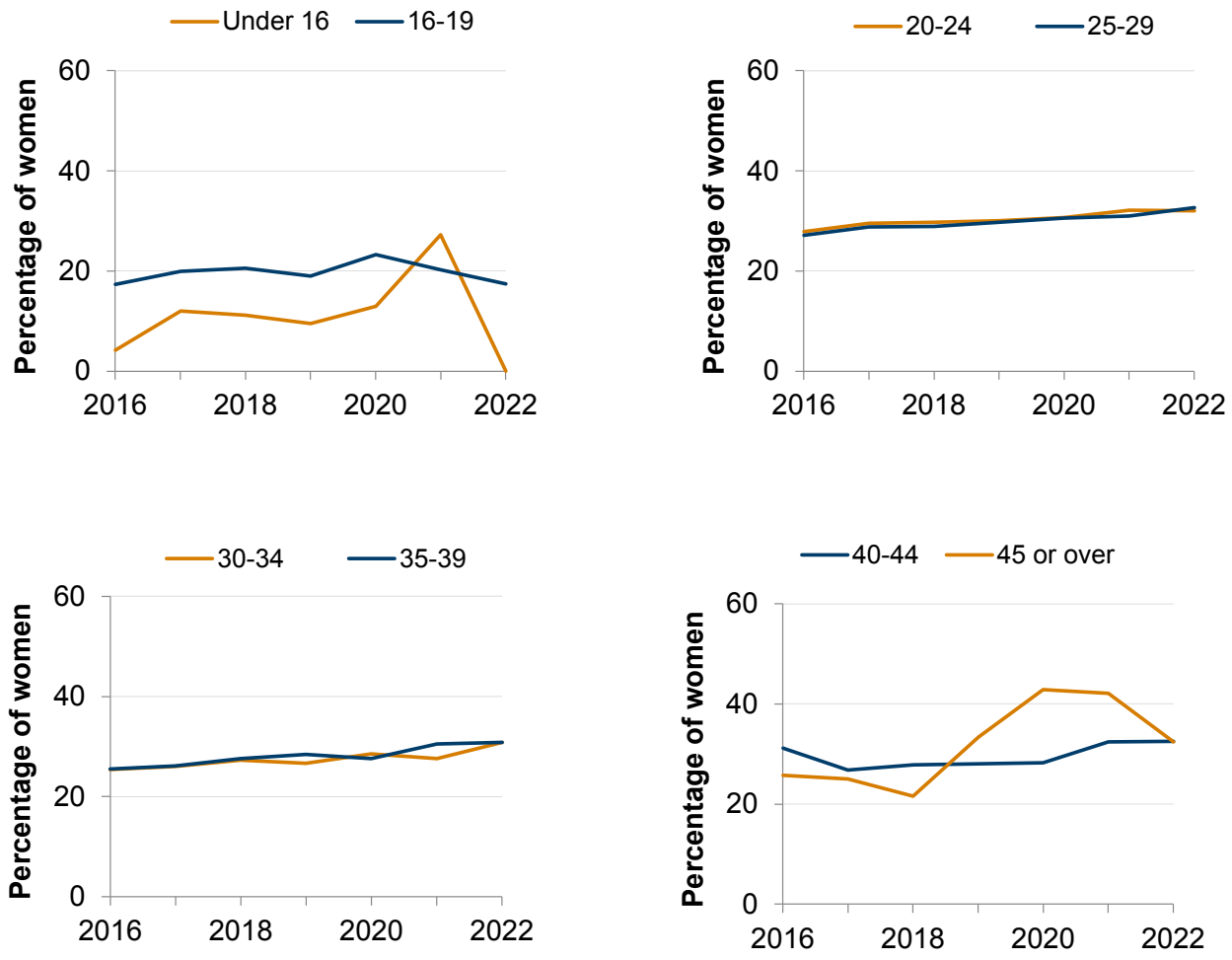
Three out of ten (31%) pregnant women had a BMI of 30 or greater at their initial assessment, an increase of one percentage point from the previous year.

The percentage has increased in every year since data collection started in 2016 and was five percentage points higher in 2022 than in 2016.

The percentage is also higher than the percentage of all adults, excluding pregnant women with BMI of 30 or greater in Wales, which was 26% in 2022-23 according to the **National Survey for Wales**.

There are some data quality issues with this data item which are explained in the **quality report**.

Figure 7: Percentage of women with a BMI of 30+ at initial assessment, by age of woman, 2016 to 2022 [Note 1]



Description of Figure 7: Line charts showing that the percentage of women with BMI 30+ was similar across most age groups between 2016 and 2022. The percentage was lowest for pregnant women in the youngest groups (under 16 and 16 to 19).

Source: Maternity Indicators dataset, Digital Health and Care Wales

Initial assessment indicators for Wales, by mother's age (StatsWales)

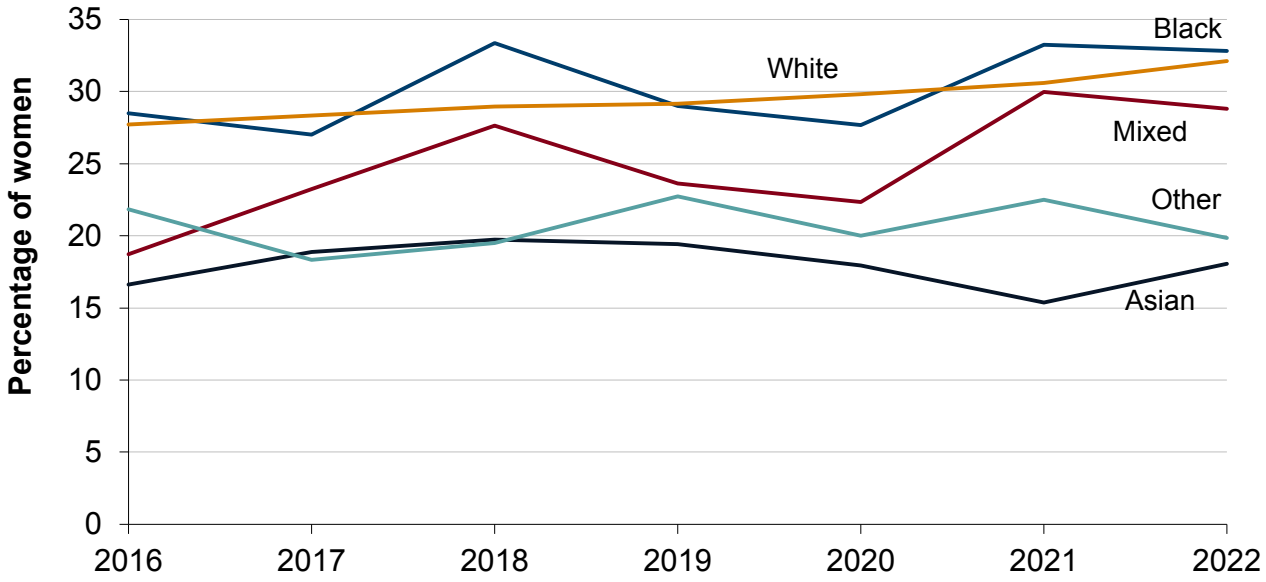
[Note 1] The percentages are based on all records with valid data recorded for height and weight at initial assessment, and age of mother who had their initial assessment at 14 completed weeks or earlier. In 2022, 23,541 pregnant women had their initial assessment by 14 weeks gestation, and of these 589 had missing or invalid data recorded for these data items.

In 2022, there was little variation in the percentage of pregnant women with a BMI of 30 or more between most age groups. The percentage varied between 31% and 33% in all age groups between 20 to 24 and 45 and older; while the percentage was markedly lower for the 16 to 19 age group (17%) and none of the under 16 age group were recorded as having a BMI of 30 or more.

The annual change was small for most age groups. Of those groups with more than 100 pregnant women, the largest annual increase was for the 30 to 34 age group (3.3 percentage points) and the largest annual decrease was for the 16 to 19 age group (2.8 percentage points).

Note as there are few (less than 100) pregnant women aged under 16 and 45 or over, there may be large year-to-year changes due to natural volatility.

Figure 8: Percentage of women with a BMI of 30+ at initial assessment, by ethnic group, 2016 to 2022 [Note 1]



Description of Figure 8: Line chart showing that the percentage of pregnant women who had a BMI of 30 or more differs widely by ethnic group. A greater proportion of women in the Black and White ethnic groups had BMI of 30 or more than in the other groups.

Source: Maternity Indicators dataset, Digital Health and Care Wales

BMI at initial assessment, by ethnic group (StatsWales)

[Note 1] The percentages are based on all records with valid data recorded for height and weight at initial assessment, and ethnic group, who had their initial assessment at 14 completed weeks or earlier. In 2022, 23,541 pregnant women had their initial assessment by 14 weeks gestation, and of these 5,635 had missing or invalid data recorded for these data items.

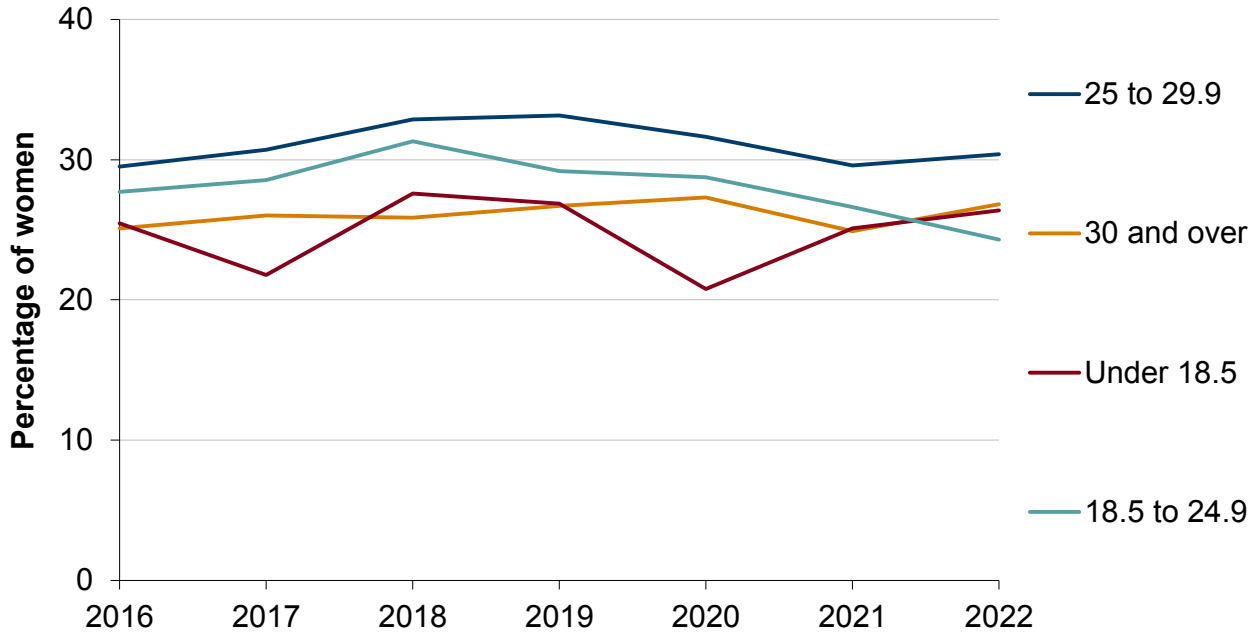
A third (33%) of pregnant women from Black ethnic groups and a third (32%) of

pregnant women from White ethnic groups had a BMI of 30 or more. The percentage for both ethnic groups only changed marginally since the previous year, but both have been on broadly upward trends since data was first collected in 2016.

One in three (29%) pregnant women from Mixed ethnic groups had a BMI of 30 or more. This was a marginal decrease on the previous year, but the percentage of this group has the steepest longer-term upward trend and was 10 percentage points higher in 2022 than in 2016.

One in five (20%) pregnant women from Other ethnic groups and just fewer than one in five (18%) pregnant women from Asian ethnic groups had a BMI of 30 or more. The percentage for both groups has been the lowest of all five ethnic groups throughout the seven years for which there is data, and the trend for both has remained relatively stable with some year-to-year fluctuations.

Figure 9: Percentage of women who gained the recommended amount of weight between their initial assessment and birth, by BMI group at initial assessment, 2016 to 2022 [Note 1] [Note 2]



Description of Figure 9: Line chart showing there is variation in the percentage of pregnant women who gained the recommended amount of weight during pregnancy when grouped by mother's BMI group. While all groups have varying rates from year-to-year, the majority have remained broadly consistent over the longer-term.

Source: Maternity Indicators dataset, Digital Health and Care Wales

[Note 1] The percentages are based on all records with valid data recorded for height and weight at initial assessment and birth, who had their initial assessment at 14 completed weeks or earlier and were pregnant with one baby. In 2022, 23,226 women were pregnant with one baby and had their initial assessment by 14 weeks gestation. Of these 8,315 had missing or invalid data

recorded for these data items.

[Note 2] Wales data excludes Hywel Dda and Swansea Bay health boards. See **quality report** for more detail.

The Institute of Medicine (IOM) guidelines recommends a total weight gain of between 12.5 and 18kg for pregnant women with a BMI of less than 18.5; between 11.5 and 16kg for pregnant women with a BMI between 18.5 and 24.9; between 6.8 and 11.3kg for pregnant women with a BMI between 25 and 29.9; and between 5 and 9kg for pregnant women with a BMI 30 or more.

In 2022, three in ten (30%) of pregnant women with a BMI between 25 and 29.9 (overweight) at initial assessment gained the recommended amount of weight during pregnancy, the highest rate of all BMI groups in all years where data is available.

The rate was 27% for pregnant women in the BMI 30 or more (obese) group, and 26% for pregnant women in the BMI less than 18.5 (underweight) group.

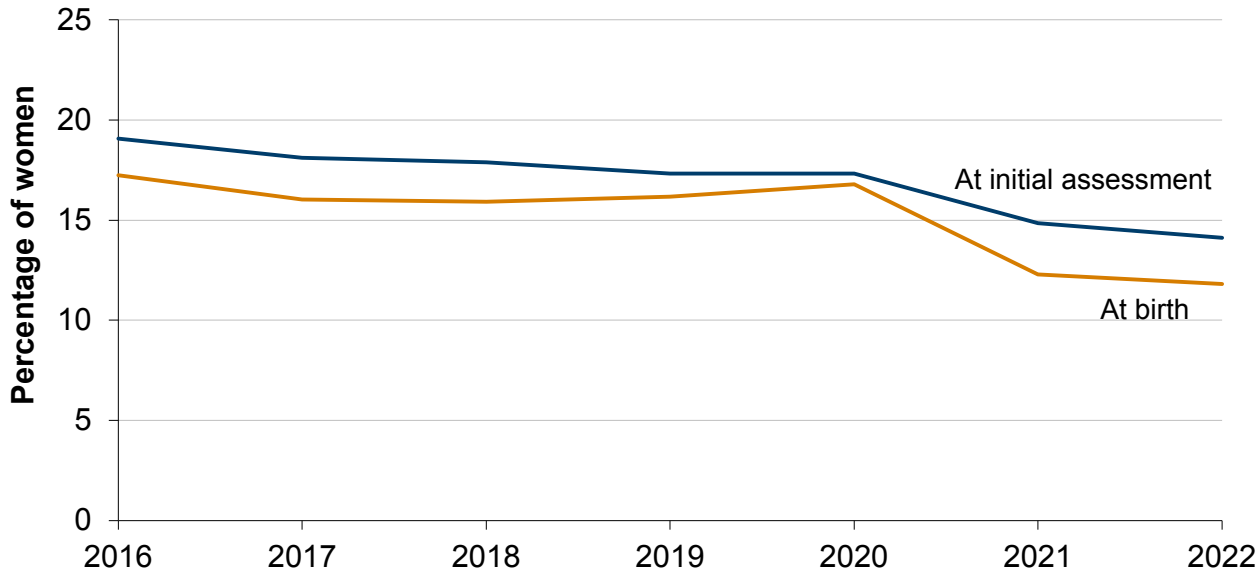
The rate was lowest (24%) for pregnant women in the BMI 18.5 to 25 (normal range) group. While there is year-to-year variation, the rate for this group has decreased by 7 percentage points in the last five years.

Smoking at initial assessment and birth

During the initial assessment and at birth, women are either asked to self-report if they are a smoker or they are tested with a carbon monoxide (CO) monitor. CO monitoring is considered more accurate than self-reporting, but has largely been suspended since the COVID-19 pandemic to reduce the risks of spreading the virus. Between 2016 and 2020, the percentage of women CO monitored at initial assessment ranged between 20% and 30%; however, in 2022 it was 1.8%.

Fewer women have been CO monitored at birth across the whole time series: between 2016 and 2020, the percentage of women CO monitored ranged from 1.3% to 2.1% and it was 0.7% in 2022.

Figure 10: Percentage of women who were recorded as a smoker at initial assessment and at birth, 2016 to 2022 [Note 1] [Note 2]



Description of Figure 10: Line chart showing that the percentage of women recorded as a smoker at initial assessment decreased gradually until 2020, then decreased at a faster rate in the subsequent years. The percentage of smokers recorded at birth had been relatively stable until 2020 but has since decreased at a similar rate to smokers at initial assessment.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Smoking at initial assessment and birth, by health board providing the service (StatsWales)

[Note 1] The percentages are based on all records with valid data recorded for smoking at initial assessment and smoking at birth separately. In 2022, 568 records had no data or invalid data recorded for smoking at initial assessment and 5,148 records had not data for smoking at birth.

[Note 2] In 2022, Hywel Dda health board did not provide any data for smoking at birth and Cwm Taf Morgannwg had an unusually high percentage of missing data.

In 2022, 14.1% of pregnant women were recorded as smokers at their initial assessment. This is 0.7 percentage point lower than in the previous year and 5.0 percentage points lower than in 2016.

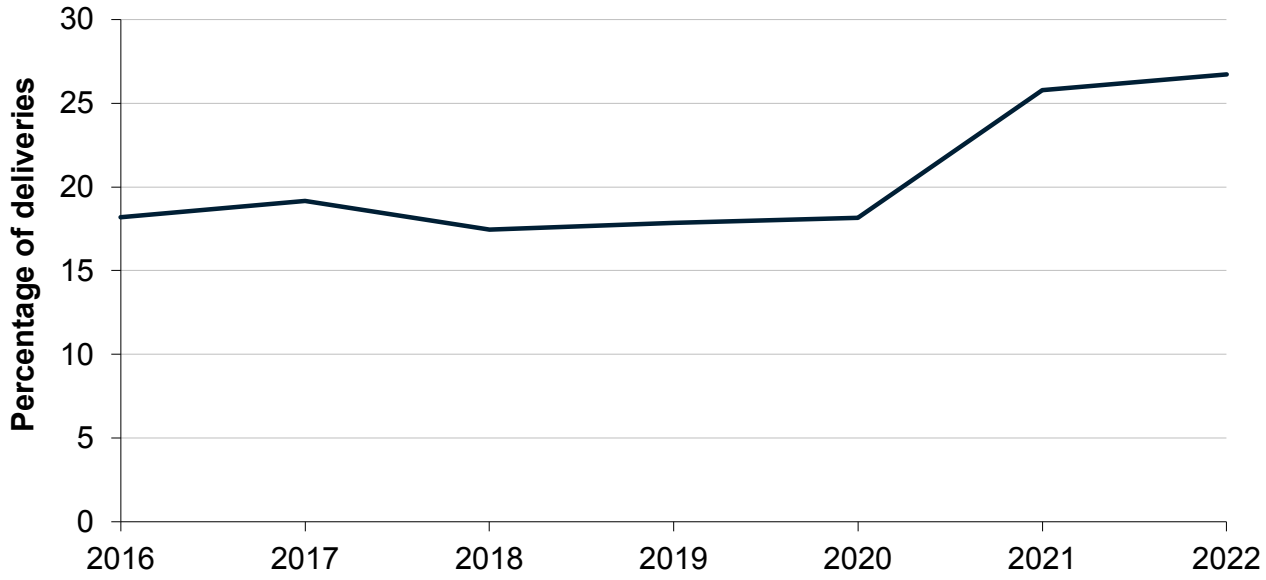
12% of women who birthed in 2022 were recorded as being smokers at the time they gave birth. This is 0.5 percentage points lower than in the previous year and 5.4 percentage points lower than in 2016.

The large decreases in smoking rates at initial assessment since 2020 coincide with nearly all data being self-reported, rather than being CO monitored. This change in data collection method may explain the sharp falls from this point onwards.

The smoking rates of pregnant women (both at initial assessment and birth) are similar to smoking rate for all adults in Wales, which was 13% in 2022-23 according to the **National Survey for Wales**.

There are some data quality issues with this data item which are explained in the **quality report**.

Figure 11: Percentage of women who ‘stopped smoking’ during pregnancy, 2016 to 2022 [Note 1]



Description of Figure 11: Line chart showing the percentage of women who were recorded as smokers at initial assessment, but recorded as non-smokers at birth increased between 2020 and 2022, following a stable trend in the previous five years.

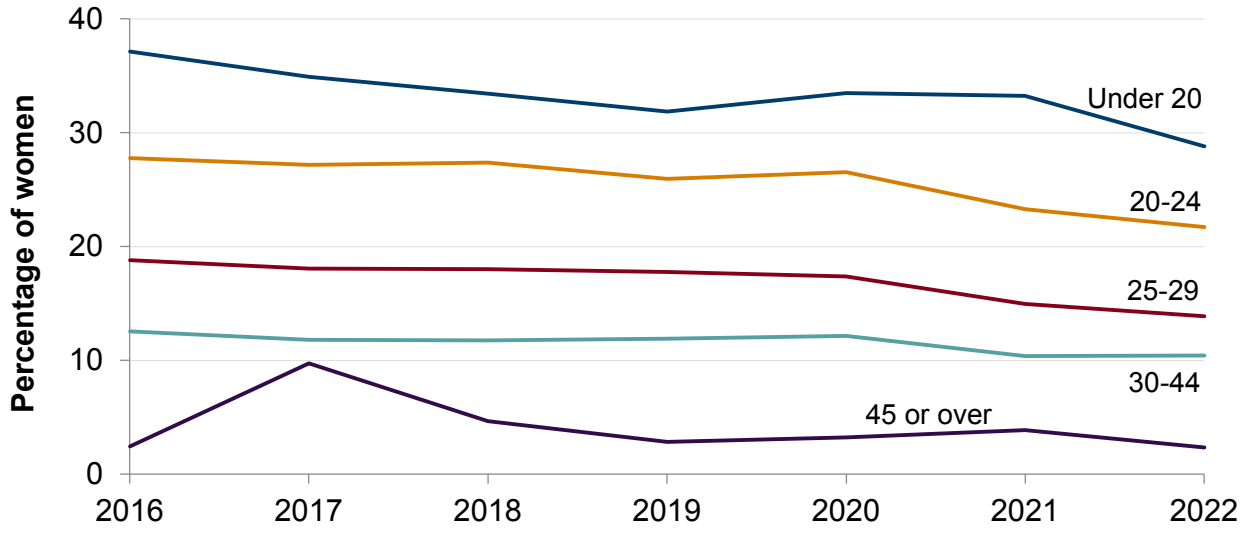
Source: Maternity Indicators dataset, Digital Health and Care Wales

Number and percentage of women who 'stopped smoking' during pregnancy, by health board providing the service (StatsWales)

[Note 1] The percentages are based on the number of records with valid data for smoking status at both initial assessment and birth. In 2022, 5,322 records had invalid or missing data for these data items, the highest number since data was first collected.

In 2022, 27% of women who were smokers at the initial assessment were not smokers at birth. This is an increase of 0.9 percentage points since the previous year, and an increase of 8.5 percentage points since data was first collected in 2016. The large increase since 2021 may be affected by nearly all data being self-reported, rather than being CO monitored and the higher-than-usual amount of missing data in the past two years.

Figure 12: Percentage of women who were recorded as smokers at initial assessment, by age of woman (at initial assessment), 2016 to 2022 [Note 1]



Description of Figure 12: Line chart showing that in most age groups, the percentage of pregnant women who were recorded as a smoker at initial assessment decreased between 2016 and 2022.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Number and percentage of mothers smoking at initial assessment and

birth in Wales, by age of mother (StatsWales)

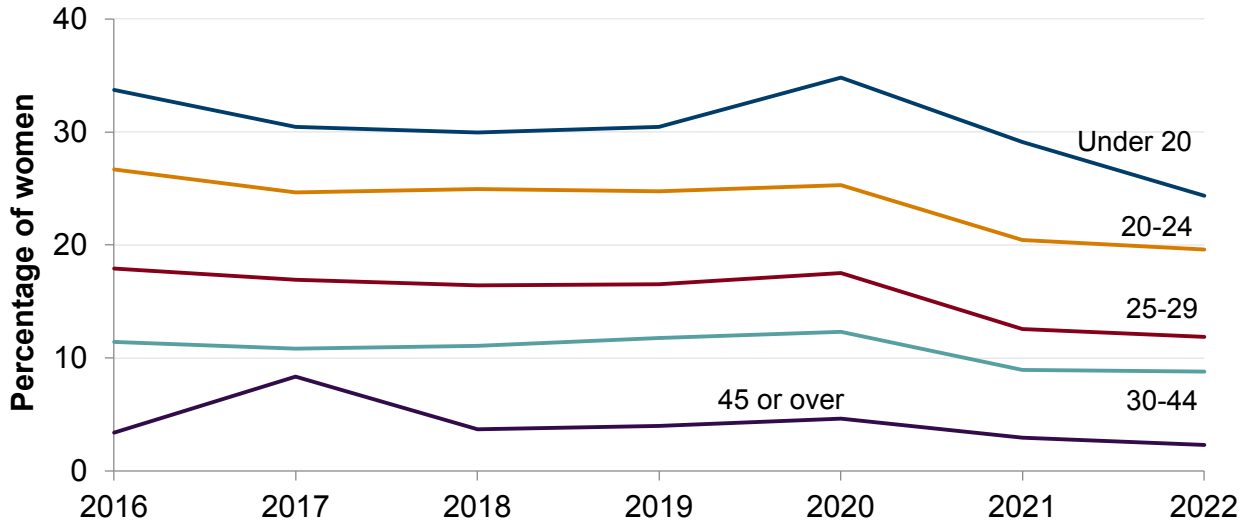
[Note 1] The percentages for each indicator are based on records with valid data for smoking status at initial assessment and age. In 2022, there were 568 records with missing data for either of these items.

The percentage of pregnant women recorded as a smoker at initial assessment was higher in younger age groups and lower in older age groups.

Nearly three in ten (29%) pregnant women aged 16 to 19 were recorded as a smoker at initial assessment, compared to a little more than two in ten (22%) aged 20 to 24, and one in ten (10%) aged 35 or over.

Smoking rates at initial assessment have fallen over the last five years in nearly all age groups., other than those aged under 16, which is subject to year-to-year volatility due to the low number of women in this group.

Figure 13: Percentage of women who were recorded as smokers at the time of giving birth, by age of woman (at birth), 2016 to 2022 [Note 1]



Description of Figure 13: Line charts showing that there has been a decrease in the percentage of women who were recorded as a smoker at birth between 2016 and 2022, in all age groups.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Number and percentage of mothers smoking at initial assessment and birth in Wales, by age of mother (StatsWales)

[Note 1] The percentages for each indicator are based on records with valid data for smoking status at birth and age. In 2022, there were 5,148 records with missing data for either of these items.

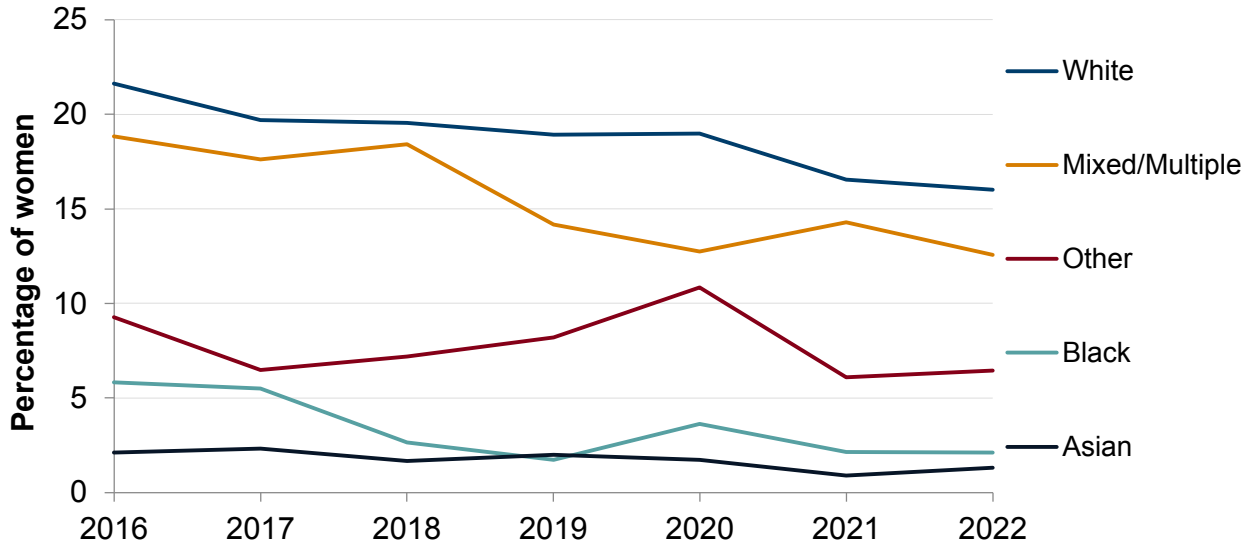
The percentage of pregnant women recorded as a smoker at birth followed a

very similar pattern to smoking at initial assessment; smoking rates were highest for pregnant women in younger age groups and lower in older age groups.

A quarter (25%) of pregnant women aged 16 to 19 were recorded as smokers at birth, compared to a fifth (20%) of pregnant women aged 20 to 24 and less than a tenth (9%) of pregnant women aged 30 or older.

Smoking rates at birth have fallen over the last five years in all age groups.

Figure 14: Percentage of women who were recorded as smokers at initial assessment, by ethnic group of woman, 2016 to 2022 [Note 1]



Description of Figure 14: Line chart showing that smoking rates have decreased for women from all ethnic groups at initial assessment, between 2016 and 2022.

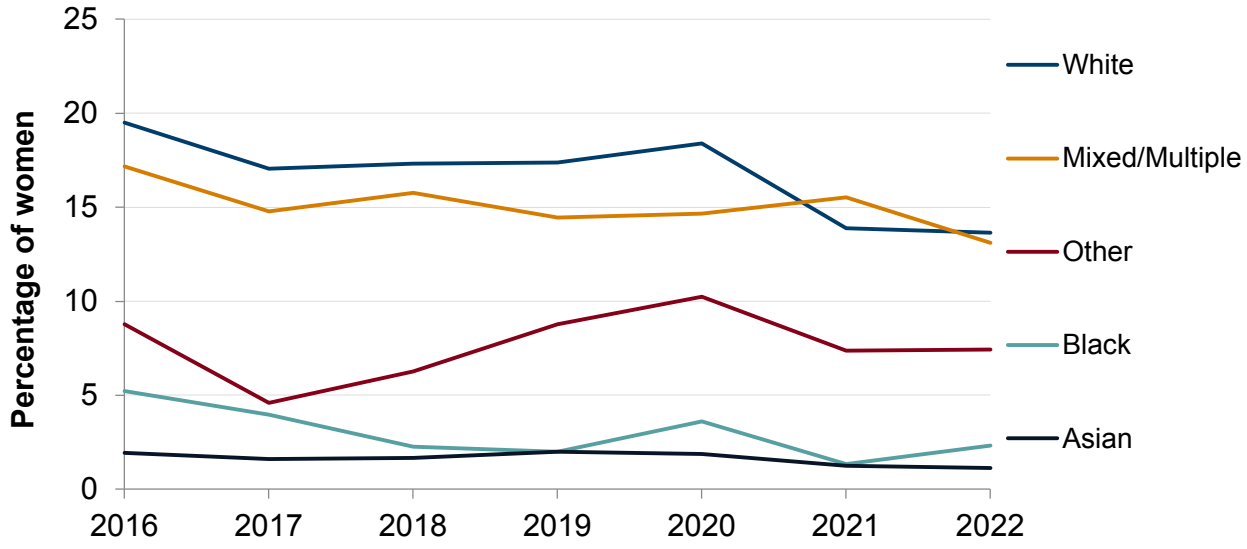
Source: Maternity Indicators dataset, Digital Health and Care Wales

Number and percentage of mothers smoking at initial assessment and

birth in Wales, by ethnic group (StatsWales)

[Note 1] The percentages are based on records with valid data for smoking status at initial assessment and ethnic group. In 2022, there were 6,297 records with missing or invalid data at initial assessment for these data items.

Figure 15: Percentage of women who were recorded as smokers at birth, by ethnic group of woman, 2016 to 2022 [Note 1]



Description of Figure 15: Line chart showing that smoking rates have decreased for women from all ethnic groups at birth, between 2016 and 2022.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Number and percentage of mothers smoking at initial assessment and birth in Wales, by ethnic group (StatsWales)

[Note 1] The percentages are based on records with valid data for smoking

status at birth and ethnic group. In 2022, there were 8,708 records with missing or invalid records for birth for these data items.

The percentage of pregnant women recorded as a smoker differs widely by ethnic group. At initial assessment, smoking rates varied from 16% of pregnant women from White ethnic groups to 1% of pregnant women from Asian ethnic groups.

Similarly at birth, smoking rates varied between 14% of pregnant women from White ethnic groups to 1% of pregnant women from Asian ethnic groups.

Over the past five years the smoking rates have decreased in the White and Mixed ethnic groups, while rates have been broadly similar (but at a much lower level) for pregnant women of Other, Black and Asian ethnic groups.

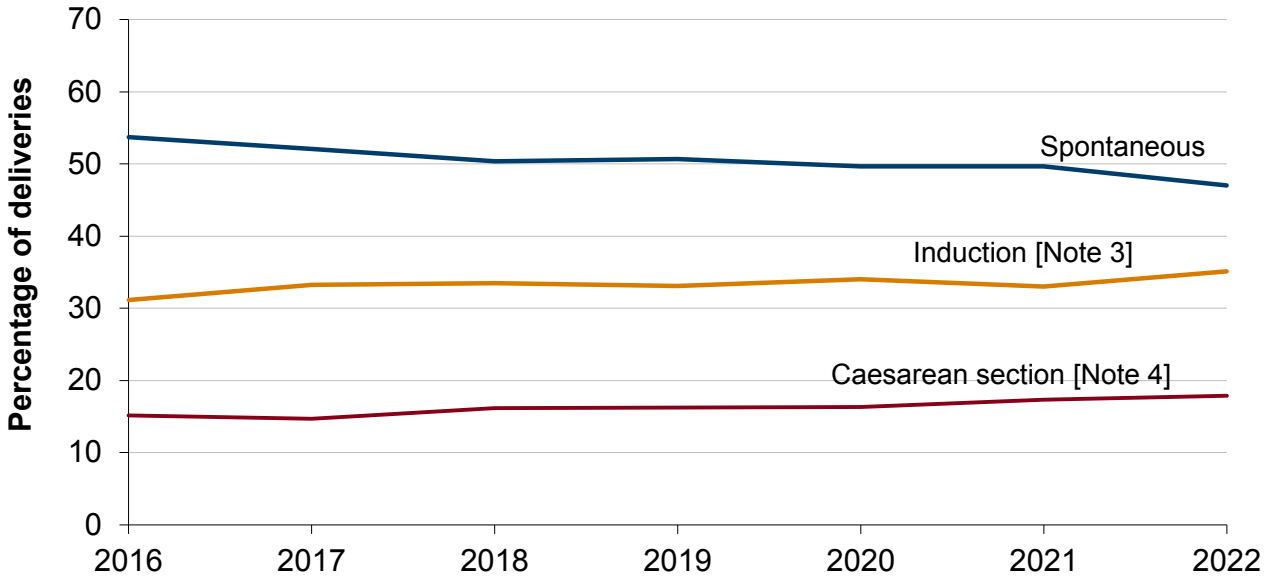
Delivery characteristics

Statistics presented in this section refer to the 27,163 deliveries recorded in the Maternity Indicators dataset which took place in 2022.

Onset of labour

Onset of labour is the method by which labour began. It includes induction methods such as surgical or medical induction or a combination of the two but it does not include any methods that are used to accelerate labour.

Figure 16: Percentage of labours onset by each mode, Wales, 2016 to 2022 [Note 1] [Note 2]



Description of Figure 16: Spontaneous onset of labour has been on a downward trend, while onset by induction and caesarean section have gradually increased between 2016 and 2022.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Mode of onset of labour by health board providing the service (StatsWales)

[Note 1] The percentages are based on records with valid onset of labour data. In 2022, there were 639 records which had missing or invalid data reported by the five health boards that are included in the Wales total.

[Note 2] Hywel Dda and Aneurin Bevan did not provide correctly recorded data for this data item so have been excluded from the analysis. Data for Wales represents the remaining five health boards, see quality report for more information.

[Note 3] Includes medical induction, surgical induction and cases where a combination of both was used.

[Note 4] Any caesarean section carried out before the onset of labour; or a planned elective caesarean section carried out immediately following the onset of labour, when the decision was made before labour.

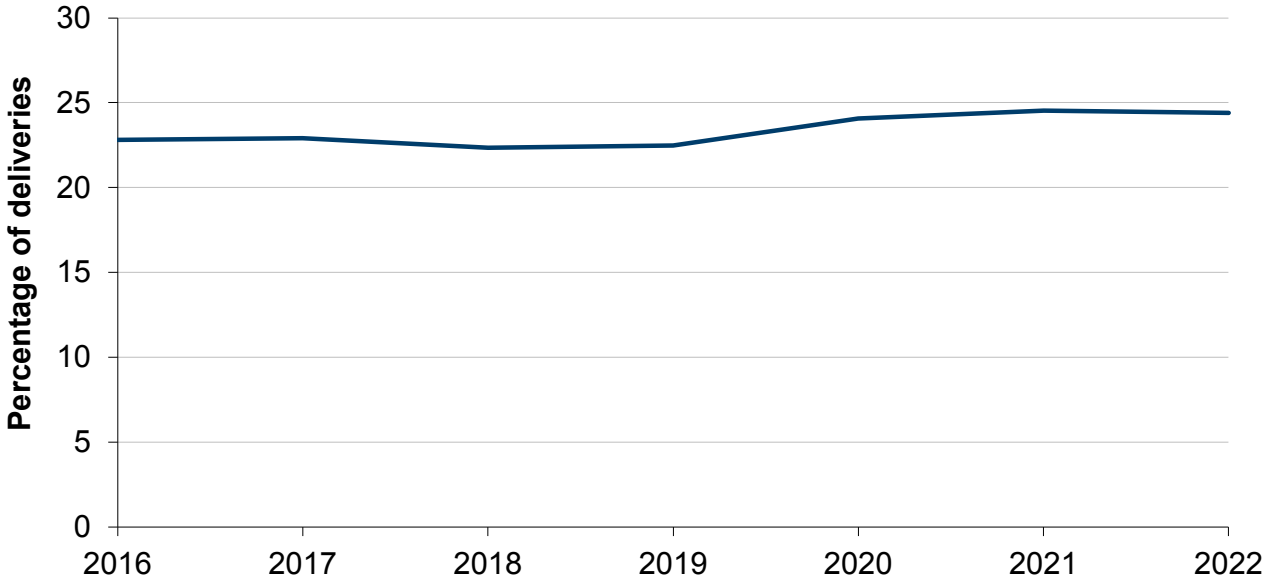
In 2022, just less than half (47%) of labours began spontaneously. This is 2.6 percentage points lower than in the previous year and 6.7 percentage points lower than in 2016.

Just over a third (35%) of labours were onset by induction, 3.9 percentage points higher than in 2016; and a little more than one in six (18%) were onset through caesarean section, 2.8 percentage points higher than in 2016.

Pain relief

An epidural is a method of pain relief which involves an injection of local anaesthetic into the space outside the dura mater of the spinal cord in the lower back region to produce a loss of sensation especially in the abdomen or pelvic region.

Figure 17: Percentage of deliveries where an epidural was administered 2016 to 2022 [Note 1] [Note 2]



Description of Figure 17: Line chart showing the percentage of women having epidurals has remained stable over the last three years, following a small increase between 2019 and 2020.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Epidurals by health board providing the service (StatsWales)

[Note 1] The percentages are based on records with valid data for pain relief. In 2022, there were 5,077 records with missing or invalid data for this data item.

[Note 2] In the case of a delivery of a multiple birth, any mention of an epidural is counted.

In 2022, an epidural was administered in just fewer than a quarter (24%) of deliveries. This is 0.1 percentage points lower than the previous year, but 1.6

percentage points higher than in 2016.

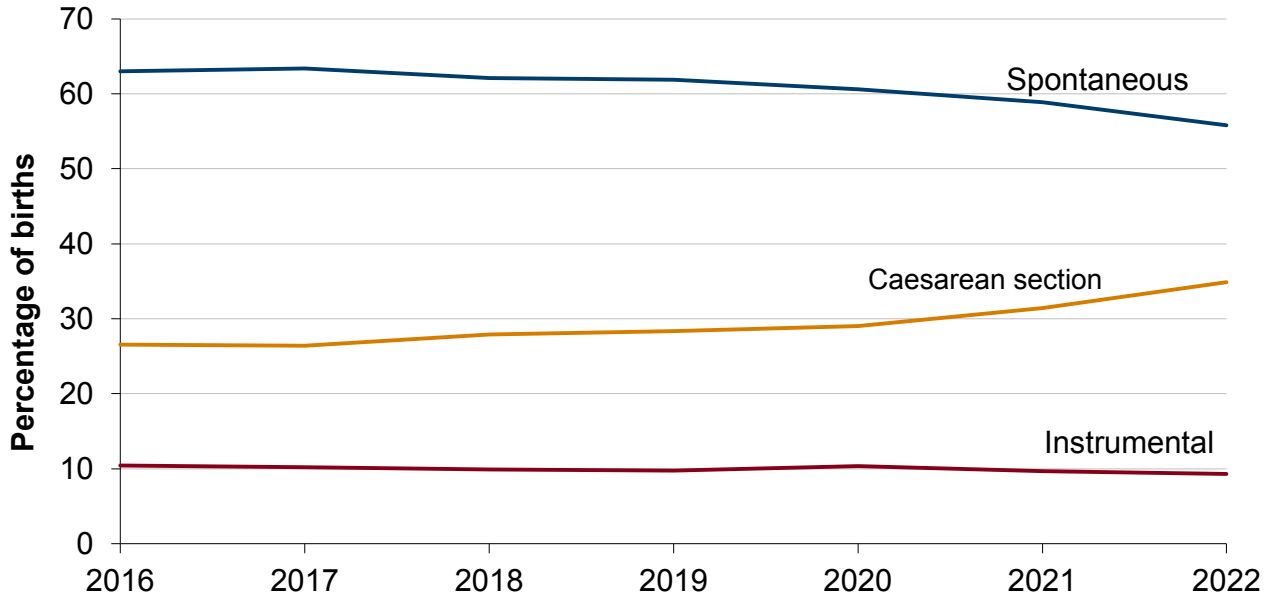
There are some data quality issues with this data item which are explained in the **quality report**.

Mode of birth

The mode of birth relates to how the baby was delivered and is often different to the mode of onset of labour.

There are three modes of birth recorded in the Maternity Indicators dataset and they are defined as: caesarean section: elective and emergency caesarean section deliveries; instrumental: forceps cephalic deliveries and ventouse (vacuum) deliveries; and spontaneous vaginal: baby born by maternal effort.

Figure 18: Percentage of births (live and still) by mode of birth, 2016 to 2022 [Note 1]



Description of Figure 18: Line chart showing that between 2016 and 2022, the majority of births arrived spontaneously, but spontaneous births have been on a downward trend, while caesarean sections have been on a broadly equivalent upward trend.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Mode of birth by health board providing the service (StatsWales)

[Note 1] The percentages are based on records with valid data for mode of birth. In 2022, there were 25 records with missing or invalid data for this data item.

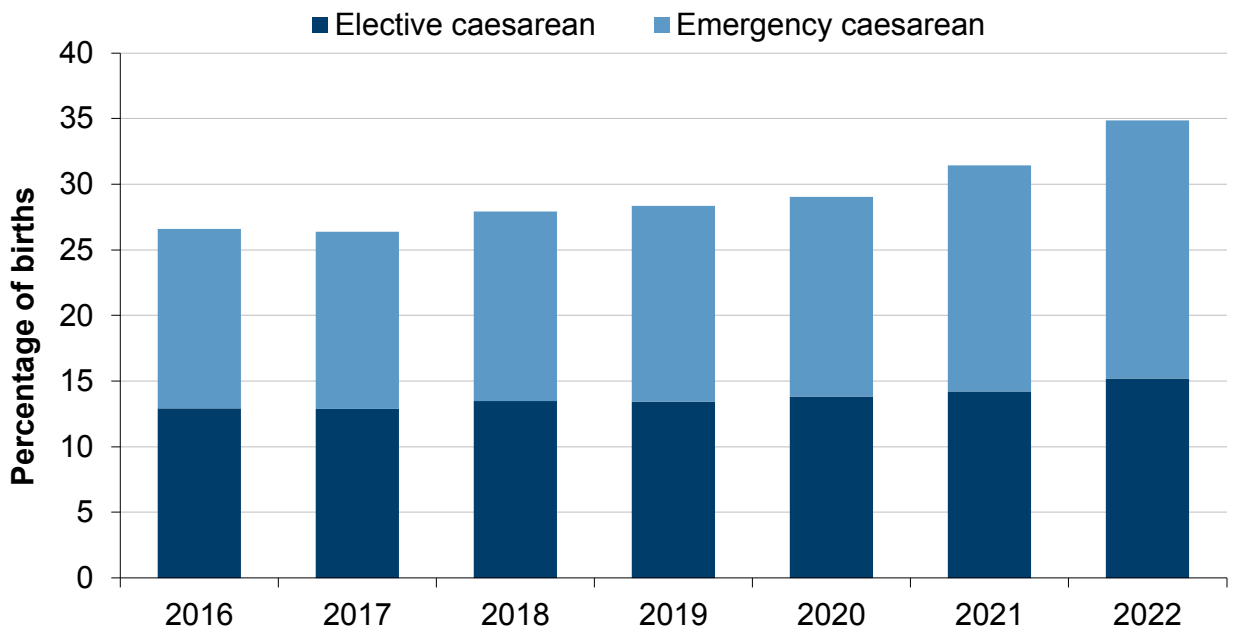
In 2022, the majority (56%) of births were spontaneous (unassisted) vaginal births, 3.0 percentage points lower than in the previous year and 7.2 percentage

points lower than in 2016.

Just over a third (35%) were delivered by caesarean section, 3.4 percentage points higher than in the previous year and 8.3 percentage points higher than in 2016.

Just fewer than one in ten (9%) deliveries required the use of either ventouse or forceps, and this proportion has remained largely constant in every year since 2016.

Figure 19: Caesarean sections as a percentage of all births (live and still), Wales, 2016 to 2022 [Note 1]



Description of Figure 19: Bar chart showing that the proportion of babies delivered via caesarean section has been increasing since 2016. There have been increases in both elective and emergency cesarean section deliveries.

Source: Maternity Indicators dataset, Digital Health and Care Wales

Mode of birth by health board providing the service (StatsWales)

[Note 1] The percentages are based on records with valid data for mode of birth. In 2022, there were 25 records which had missing or invalid data for this data item.

In 2022, the majority of caesarean section births were emergencies. One in five (20%) of all births arrived by emergency caesarean section, 2.4 percentage points higher than the previous year and 6.0 percentage points higher than in 2016.

A little more than one in seven (15%) of all births arrived via elective caesarean section, 1.0 percentage point higher than in the previous year and 2.3 percentage points higher than in 2016.

Data for mode of birth by ethnic group is available on StatsWales.

Birth outcomes and characteristics

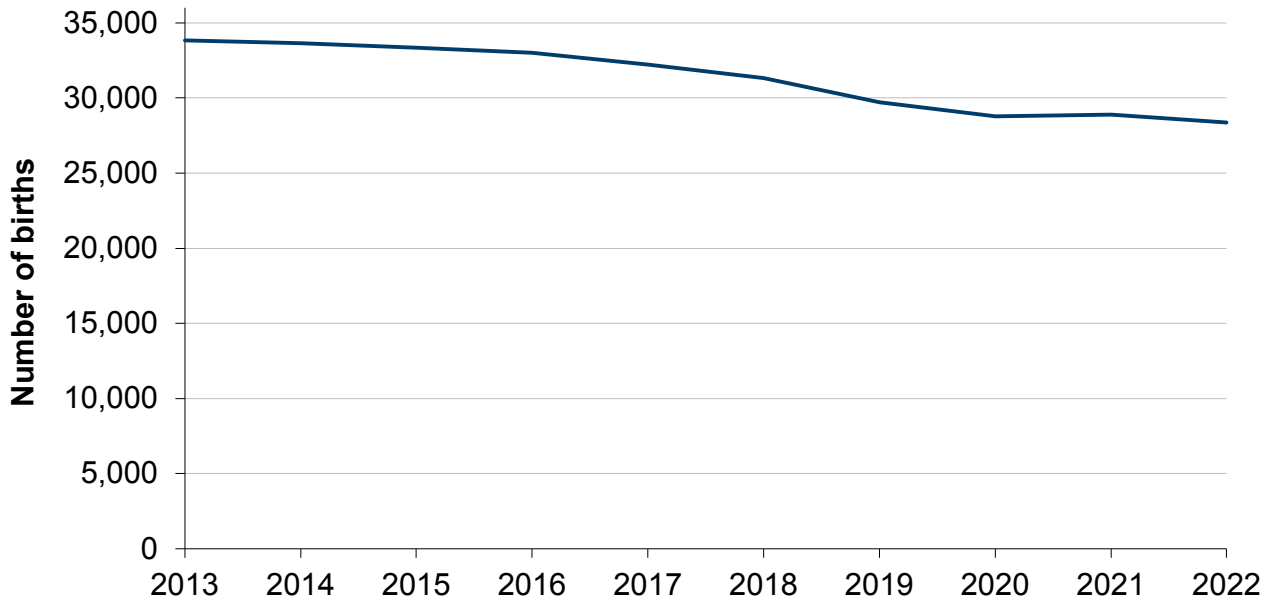
Statistics presented in this section are based on the 28,388 live births recorded in the National Community Child Health Database. Births are analysed rather than deliveries since twins or triplets could be delivered by different means.

Additional data on the number of **antenatal records (StatsWales)**, **deliveries and births by health board providing the service (StatsWales)**, **births by Welsh and non-Welsh resident mothers (StatsWales)**, and **deliveries and births by maternity unit (StatsWales)** are available on StatsWales.

Number of births

Live births can be recorded as singletons (one baby born), or multiples (twins, triplets or more babies born).

Figure 20: Number of live births, Wales, 2013 to 2022



Description of Figure 20: Line chart showing the total number of live births has been downward trend over the past ten years.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Antenatal records, live births and still births by health board providing the service (StatsWales)

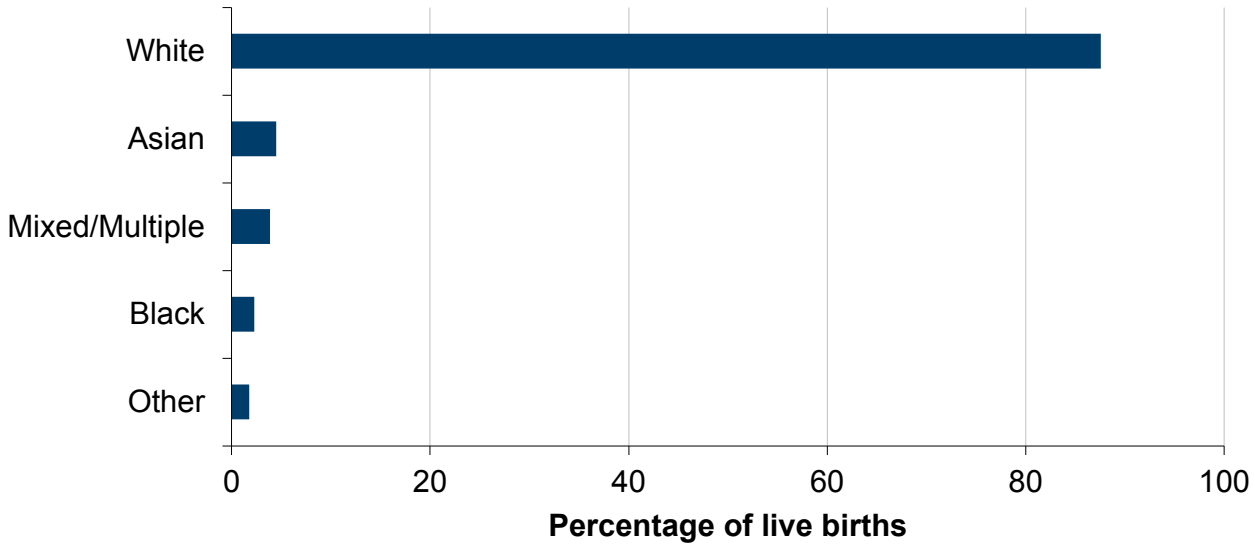
Of the 28,520 births recorded in the National Community Child Health Database in Wales in 2022, over 99% (28,388) were live births.

Following a small increase in 2021, the number of live births fell to its lowest number since broadly comparable data was collected in 1929. For the 30 years prior to 2018, the number of live births in Wales ranged between 30,000 and 37,000 per year, but has been below 30,000 in every year since. The number of live births has decreased by 15.4% compared to ten years ago; this is equivalent to just over 5,000 fewer births per year.

In 2022, one in fifty (2%) births were for multiple children. This percentage has been relatively stable for the past three years, but over the longer-term, the number of multiple births has decreased by a larger proportion than singleton births. The number of multiple births has decreased by 38.9% compared to 10 years ago; this is equivalent to 389 fewer multiple births per year.

Births and ethnicity

Figure 21: Percentage of live births by ethnic group, 2022 [Note 1]



Description of Figure 21: Bar chart showing the large majority of births were from White ethnic background, followed by Asian, Mixed/Multiple, Black and Other.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Live births to Welsh residents by ethnic group and health board providing the service (StatsWales)

[Note 1] The percentages are based on records with valid data for child's ethnic group. In 2022, there were 9,433 records which had missing or invalid data for this data item.

Almost nine out of ten (88%) babies born in 2022 were of White ethnic

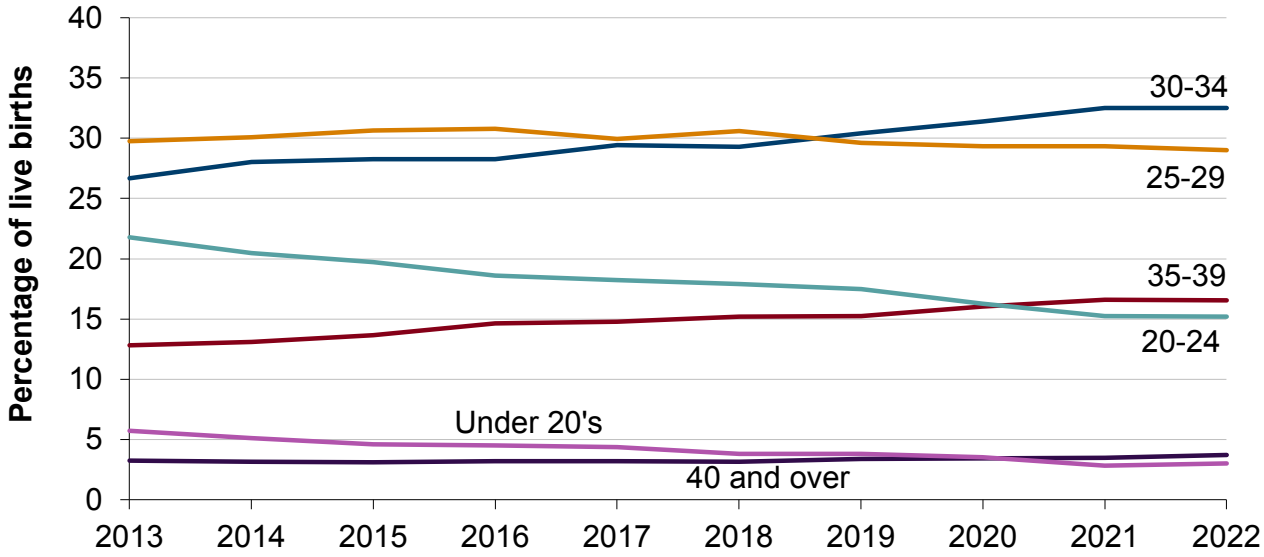
background; 4% were of Asian backgrounds; 4% were of Mixed/Multiple backgrounds; 2% were from Black backgrounds; and 2% were from Other ethnicities.

The percentage of babies from White ethnic backgrounds decreased by 2.1 percentage points since 2018. The percentage has increased slightly for all other ethnic groups over the same time period, with the largest increases in the Black ethnic group (0.8 percentage points) and the Asian ethnic group (0.6 percentage points).

Births by mother's age

Data for teenage conceptions is published by the ONS.

Figure 22: Percentage of live births by age group of mother, 2013 to 2022 [Note 1]



Description of Figure 22: Line chart showing a decreasing trend for the

percentage of women giving birth aged 24 and younger, and an increasing trend for women giving birth aged 30 to 39, over the past 10 years.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Live births to Welsh residents by local health board and mother's age (StatsWales)

[Note 1] The percentages are based on births with valid data for mother's age. In 2022, there were 36 births that had missing or invalid data for this data item.

The percentage of live births to mothers aged under 20 has fallen over the last ten years and in 2022, 3% of births were from mothers in this category, the smallest percentage of all age groups.

15% of births were from mothers aged 20 to 24. The percentage of births to mothers in this age category has fallen every year since 2009 and was 6.6 percentage points lower than ten years ago.

A little fewer than three in ten (29%) mothers birthing in 2022 were aged between 25 and 29. This percentage has remained broadly consistent since 2013.

A third (33%) of mothers birthing in the year were aged 30 to 34, the most common age group of mothers birthing in the year. This percentage has been on a clear upward trend since 2008 and was 5.9 percentage points higher than ten years ago.

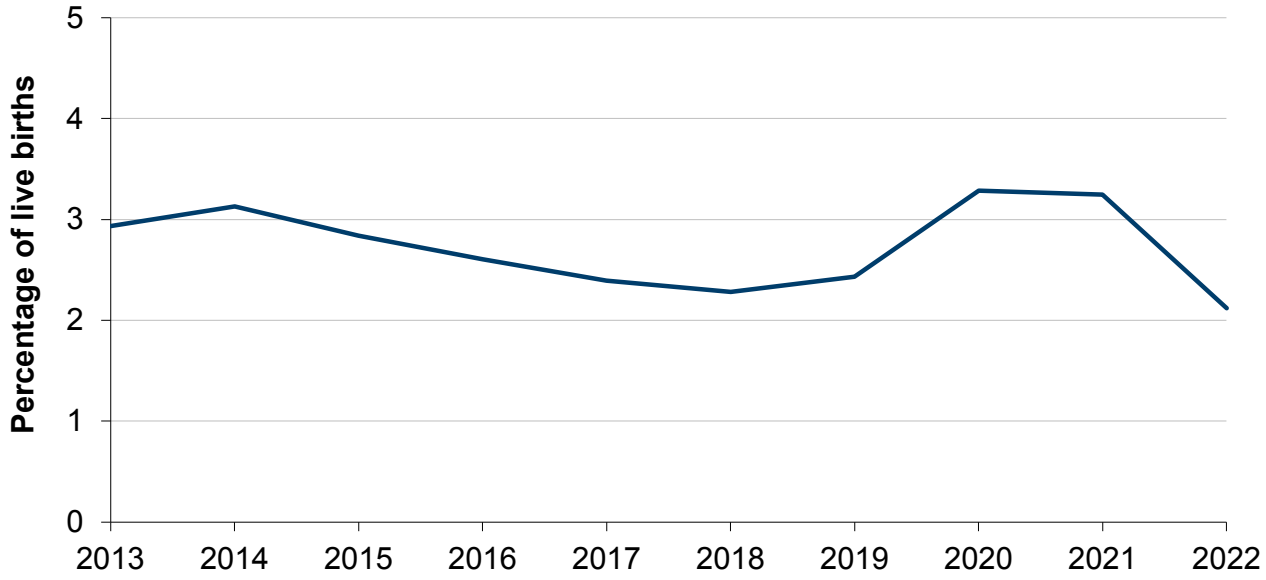
One in six (17%) mothers birthing in 2022 were aged between 35 and 39. This percentage was marginally lower than the previous year but was 3.7 percentage points higher than ten years ago. Since 2021, there have been more mothers birthing aged 35 to 39 than there were aged 20 to 24.

Just under 4% of live births were to mothers aged 40 or older in 2022. This percentage has increased marginally most years since 2001 and was 0.5 percentage points higher than ten years ago.

Home births

Health boards in Wales provide access to a range of birthing options for pregnant women, including home births.

Figure 23: Percentage of live births at home, 2013 to 2022 [Note 1]



Description of Figure 23: Line chart showing the percentage of all live births born at home resumed its longer-term slight downward trend in 2022, following a short period (between 2018 and 2021) where there was an upward trend.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Live births to Welsh residents by Local Health Board and place of birth (StatsWales)

[Note 1] The percentages are based on total live births with valid data for place of birth. In 2022, there were 80 births with missing or invalid data for this data item.

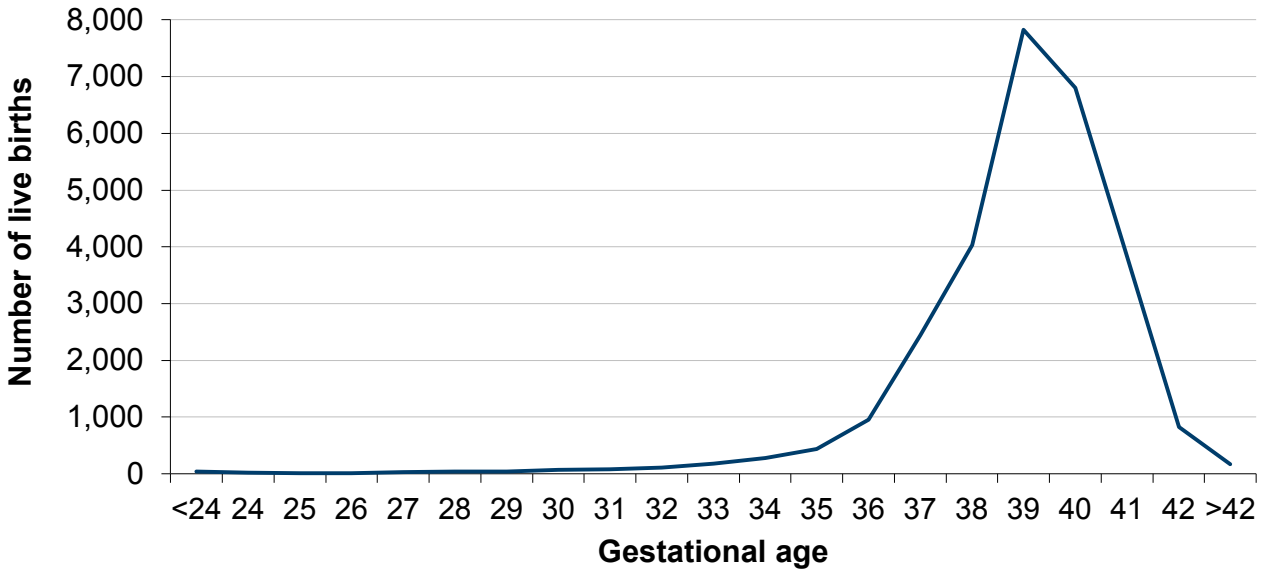
Over the past 20 years, the large majority of births have occurred in hospital settings in Wales. There was a slightly higher-than-usual percentage of home births in 2020 and 2021, which may have been related to the COVID-19 pandemic. However the home birth rate has been on a slight downward trend over the long term and in 2022, 2.1% of live births happened at home, the lowest rate since 2002.

In 2022, 0.2% of births happened in locations other than hospitals or homes.

Gestational age

Babies born prematurely or ‘pre-term’ (before the start of the 37th week of gestation) may have a higher risk of immediate or longer-term health problems.

Figure 24: Distribution of live births by gestational age, 2022 [Note 1] [Note 2]



Description of Figure 24: A column chart showing that the majority of births occurred when the gestational age was one week either side of the typical expected due date (39 completed weeks).

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

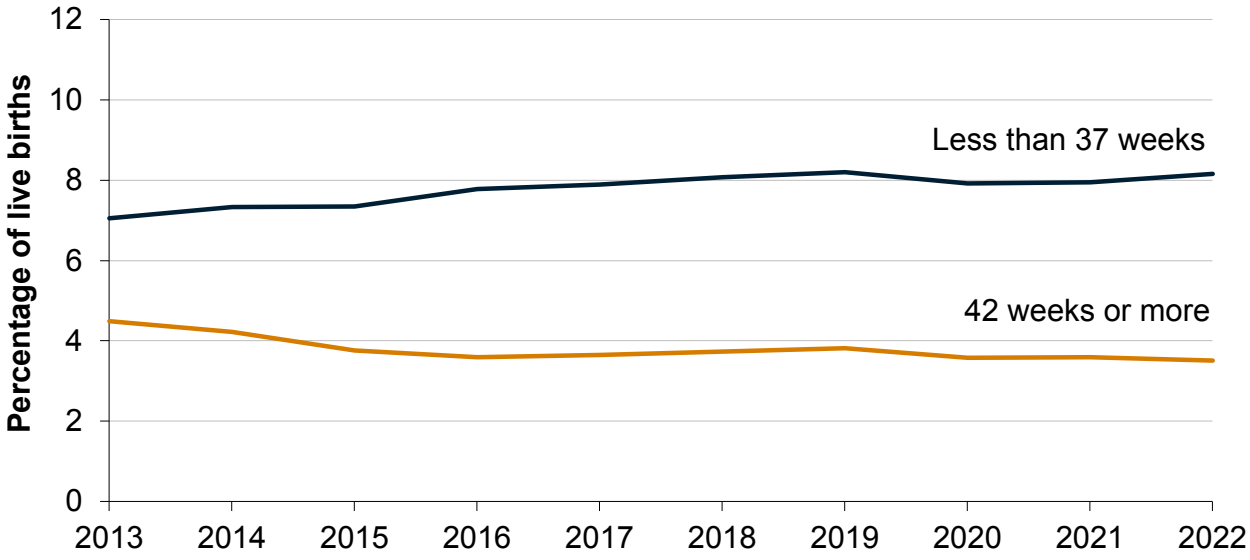
Live births to Welsh residents by gestational age (StatsWales)

[Note 1] Only includes records with valid data for gestational age. In 2022, there were 159 birth records that had missing or invalid data for this data item.

[Note 2] Gestational age is based on the best estimate available for when pregnancy started, based on either date of last menstrual period or from an ultrasound scan.

In 2022, two thirds (66.1%) of live births arrived between gestations of 38 and 40 completed weeks of pregnancy.

Figure 25: Percentage of pre-term and late live births, 2013 to 2022 [Note 1] [Note 2]



Description of Figure 25: A line chart showing that the percentage of babies delivered at gestational ages before the start of the 37th week and later than 41 completed weeks have remained broadly stable over the last seven years.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Live births to Welsh residents by local health board and gestational age (StatsWales)

[Note 1] Percentages are based on birth records with valid data for gestational age. In 2022, there were 159 records with missing or invalid data for this data item.

[Note 2] Gestational age is based on the best estimate available for when pregnancy started, based on either date of last menstrual period or from an ultrasound scan.

8.2% of live births occurred before the start of the 37th week of gestation, in 2022. This is an increase of 0.2 percentage points since the previous year and an increase of 1.1 percentage points compared to ten years ago.

3.5% of live births occurred after the 41st completed week of gestation, in 2022. This is a decrease of 0.1 percentage points since the previous year and a decrease of 1.0 percentage points compared to ten years ago.

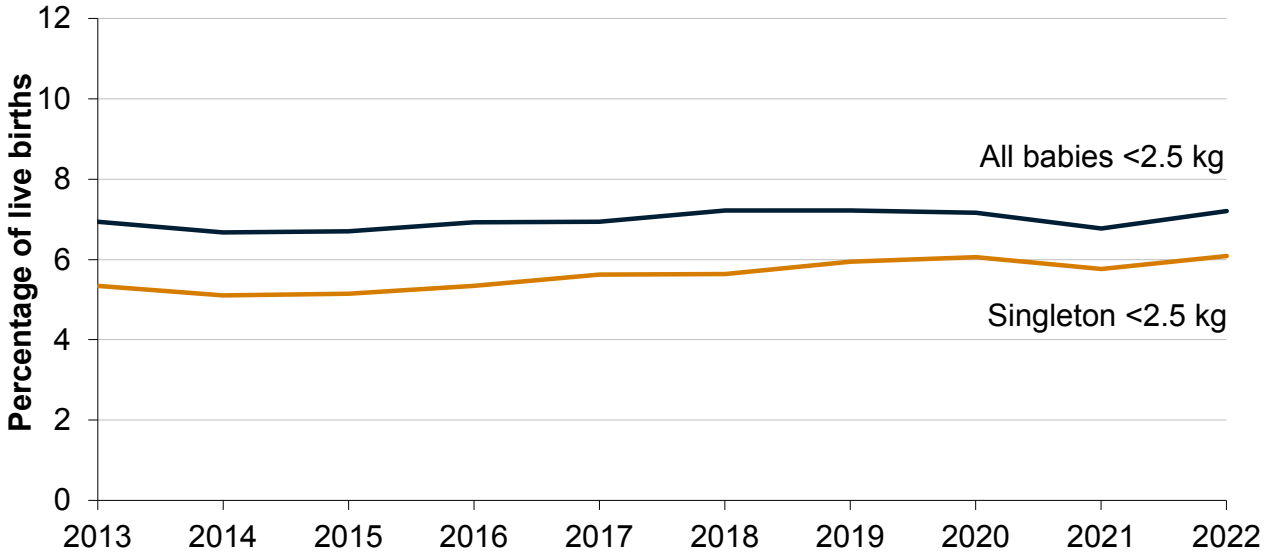
Birthweight

Low birthweight is defined as a birthweight of less than 2.5kg and can be associated with health risks in an infant's first year of life.

The percentage of live singleton births with a birthweight of less than 2.5kg is one of **50 National indicators** used to measure progress against the wellbeing goals in the Well-being of Future Generations Act.

Low birthweights are often linked to low gestational age (where the baby is born before the start of the 37th week of gestation).

Figure 26: Percentage of live births with low birthweight, 2013 to 2022 [Note 1]



Description of Figure 26: Line chart showing the proportion of singleton live births with low birthweight has been on a marginal upward trend since 2014. The percentage of all births with low birthweight has been on a similar trend.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Live births with low birthweight by number of babies (StatsWales)

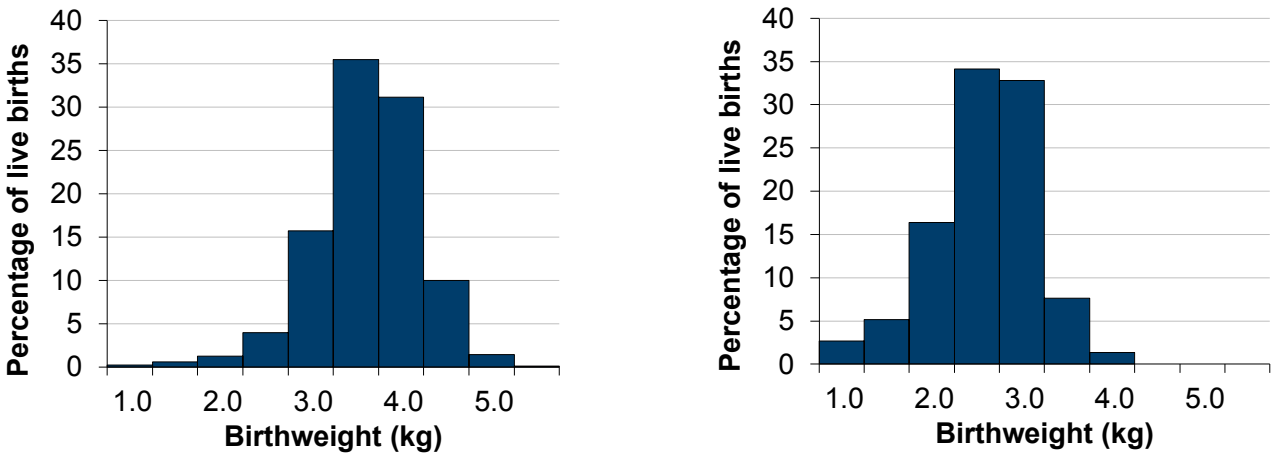
[Note 1] The percentages are based on live births with valid birthweight data. In 2022, there were 110 birth records with missing or missing or invalid data for this item. Invalid data includes records with birthweights of less than 0.5kg or more than 6kg.

In 2022, 6.1% of singleton births had low birthweight. This is 0.3 percentage points higher than in the previous year and 0.7 percentage points higher than

ten years ago.

In 2022, 7.2% of all births had low birthweight. This is 0.4 percentage points higher than in the previous year and 0.3 percentage points higher than ten years ago.

Figure 27: Spread of singleton and multiple (twins and triplets) birthweights, 2022 [Note 1]



Description of Figure 27: Bar charts showing the distribution of birthweights are different for singleton and multiple births; the majority of singleton births weighed between 3kg and 4kg, while the majority of multiple births weighed between 2kg and 3kg.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Live births to Welsh residents by birth weight and number of babies (StatsWales)

[Note 1] The percentages are based on live birth records with valid birthweight data. In 2022, there were 104 singleton births and 6 multiple births with missing

or invalid data for this item. Invalid data includes records with birthweights of less than 0.5kg or more than 6kg.

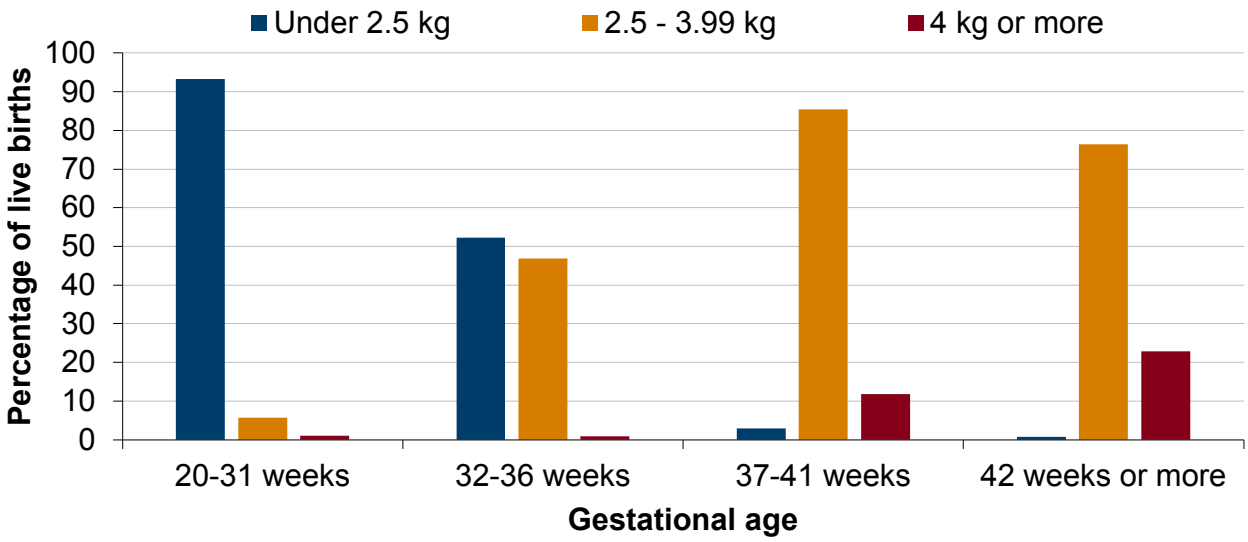
Multiple births are typically delivered at earlier gestations than singleton births, and in 2022, 65% of multiple births were delivered before 37 weeks of gestation, compared to 7% for singleton births.

The median birthweight for singleton births was 3.40kg and the mean was 3.37kg. Two thirds (67%) of singleton births had a birthweight of between 3kg and 4kg, while one in eight (12%) weighed more than 4kg.

In contrast the median birthweight for multiple births was 2.37kg and the mean was 2.31kg. Seven in ten (70%) multiple births had a birthweight of between 2kg and 3kg, while one in eleven (9%) multiple births weighed more than 3kg.

Gestational age and birthweight

Figure 28: Live births by birthweight and gestational age group, 2022 [Note 1]



Description of Figure 28: Chart showing that as gestational age increased, the proportion of babies with heavier birthweights increased.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Live births by birthweight and gestational age group (StatsWales)

[Note 1] The percentages are based on births with valid data for both birthweight and gestational age at birth. In 2022, 264 records had missing or invalid data for either of these data items.

As births with lower gestational ages have less time to develop and grow, they

are often born at lower birthweights than births with higher gestations.

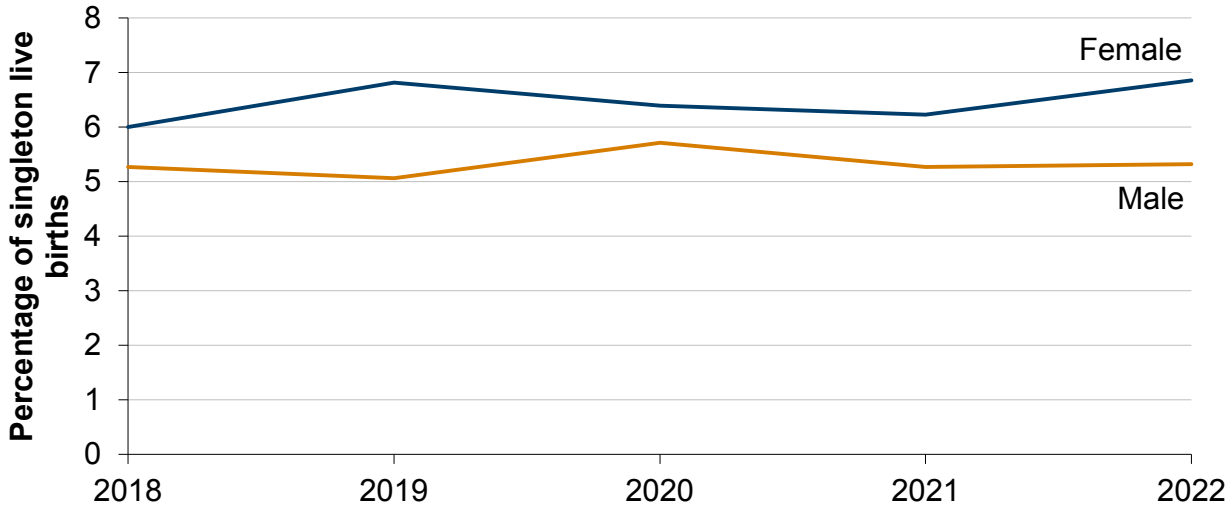
In 2022, 93% of births at gestations of 31 completed weeks or fewer weighed less than 2.5kg. This compares to 52% of births at gestations between 32 and 36 completed weeks; 3% of births at gestations between 37 and 41 completed weeks; and 1% of births at gestations of more than 41 completed weeks of pregnancy.

The large majority (85%) of babies born within two weeks either side of the typical expected due date (37 to 41 completed weeks) were of birthweights between 2.5kg and 4kg.

Nearly a quarter (23%) of babies born at gestations of more than 41 completed weeks of pregnancy weighed more than 4kg.

Low birthweight and sex

Figure 29: Percentage of singleton live births with low birthweight by sex, 2018 to 2022 [Note 1]



Description of Figure 29: Line chart showing that a slightly higher percentage of female babies had low birthweight than male babies in every year since 2018.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Singleton live births to Welsh residents by birthweight and sex (StatsWales)

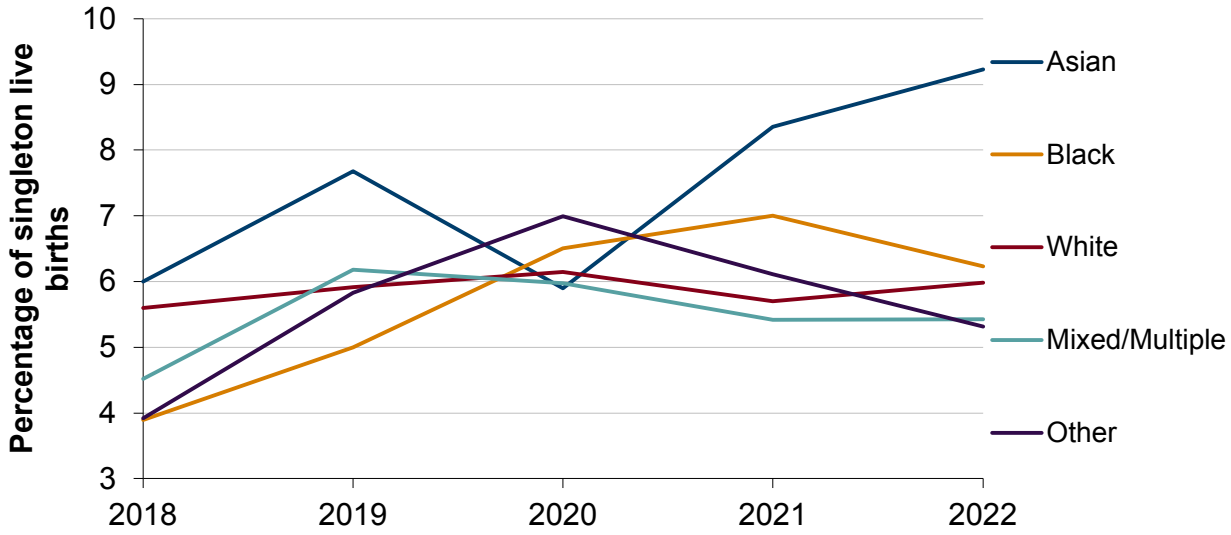
[Note 1] The percentages are based on singleton births with valid data for both birthweight and sex at birth. In 2022, 101 records had missing or invalid data for either of these data items.

In 2022, 6.9% of female babies had low birthweight. This is 0.6 percentage points higher than in the previous year and 0.9 percentage points higher than five years ago.

5.3% of male babies had low birthweight. This is 0.1 percentage points higher than in both the previous year and five years ago.

Low birthweight and ethnicity

Figure 30: Percentage of singleton live births with low birthweight by ethnic group, 2018-2022 [Note 1]



Description of Figure 30: Line chart showing that a higher percentage of babies from an Asian ethnic background had low birthweight compared to all other ethnic backgrounds over the five-year time series.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Singleton live births to Welsh residents by ethnic group and birthweight (StatsWales)

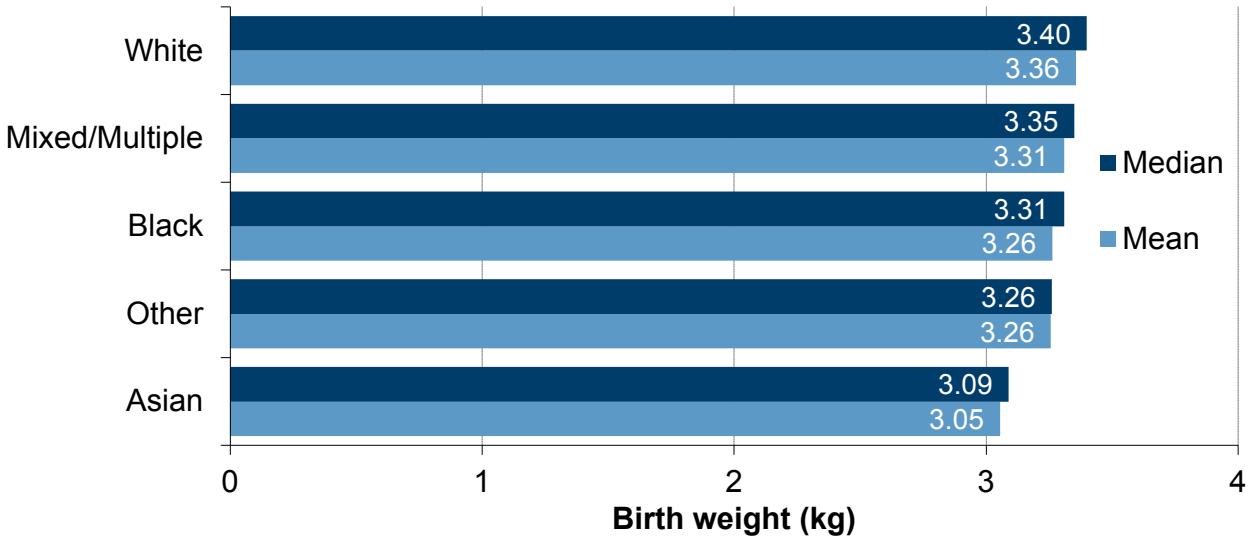
[Note 1] The percentages are based on births with valid data for both birthweight and ethnic group. In 2022, 9,280 records had missing or invalid data for either of these data items.

Various academic studies have shown that babies of Asian ethnic background have lower mean birthweights, shorter mean lengths, and smaller mean head circumferences than babies from other ethnic groups.

The percentage of babies from Asian ethnic backgrounds with low birthweight in Wales has been on a broad upward trend and reached 9.2% in 2022. This is 3.0 percentage points higher than the ethnic group (Black) with the next highest percentage of low birthweight babies.

While low birthweight rates for babies of all four other ethnic groups have varied from year-to-year, they have been broadly similar to each other, with a slight upward trend over the five years for which data is available.

Figure 31: Mean and median birthweights for live births by ethnic group 2022 [Note 1]



Description of Figure 31: Bar chart showing the median birthweight was slightly higher than the mean birthweight for all ethnic groups. Both mean and median birthweights were highest for babies of White ethnic backgrounds and lowest for babies of Asian ethnic backgrounds.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

Mean and median birthweights for live births by ethnic group (StatsWales)

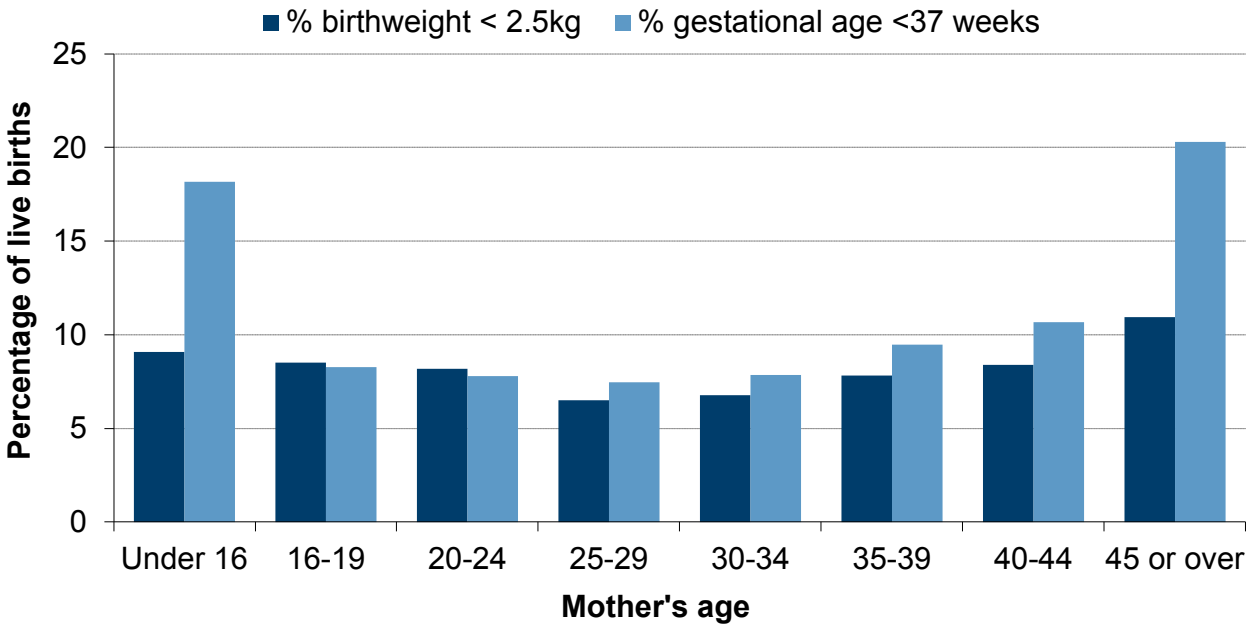
[Note 1] The percentages are based on live births with valid data for both birthweight and ethnic group. In 2022, 9,280 records had missing or invalid data for either of these data items.

The median birthweight ranged from 3.40kg for babies from White ethnic backgrounds to 3.09kg for babies from Asian backgrounds.

Similarly, the mean ranged from 3.36kg for babies from White ethnic backgrounds to 3.05 kg for babies of Asian backgrounds.

Low birthweight and mother's age

Figure 32: Percentage of live births with low birthweight and low gestational age, by mother's age at birth, 2022 [Note 1]



Description of Figure 32: Bar chart showing the percentage of low birthweight and pre-term babies was similar across most age groups, but with higher rates for both measures in the youngest and oldest age groups.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

[Note 1] The percentages are based on live births with valid data for birthweight

and mothers age; and gestational age and mothers age. In 2022, 144 records had missing or invalid data for birthweight and mothers age; and 185 records had missing or invalid data for gestational age and mothers age.

In 2022, 6.5% of babies whose mothers were aged between 25 and 29 had low birthweights, the smallest percentage of all age groups. The percentage of low birthweight babies increased as mothers' age group both increased and decreased from this point, with close to one in ten babies born with low birthweights to mothers aged under 16 or 45 or older.

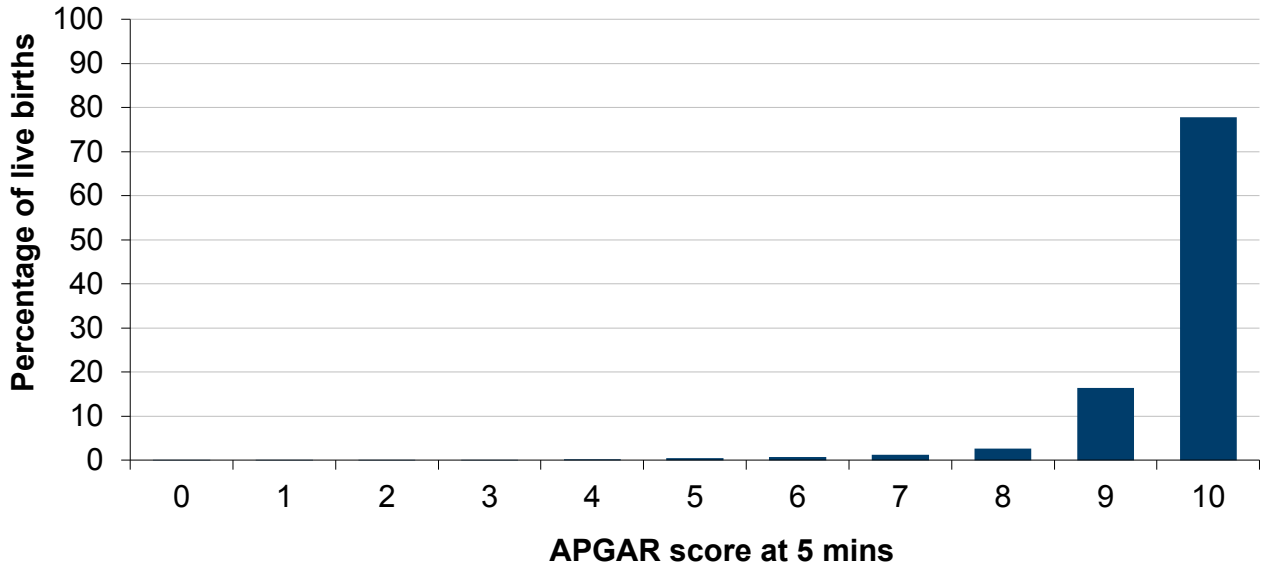
Similarly in 2022, 7.5% of babies whose mothers were aged between 25 to 29 were born pre-term, the smallest percentage of all age groups. The percentage of pre-term babies increased as mothers' age group both increased and decreased from this point, with close to one in five babies born pre-term when mothers were aged under 16 or 45 or older.

The percentage of babies with low gestational age and the percentage of babies with low birthweight has remained broadly similar across each age group over the last 10 years.

APGAR scores

APGAR (Appearance, Pulse, Grimace, Activity, and Respiration) is a quick test performed on a baby at 1 and 5 minutes after birth. The 1-minute score determines how well the baby tolerated the birthing process. The 5-minute score tells the doctor how well the baby is doing outside the mother's womb. A score of 7 or above is a sign that the new-born is in good health.

Figure 33: Percentage of live births by APGAR score at 5 minutes, 2022 [Note 1]



Description of Figure 33: Bar chart showing that the large majority of babies had high Apgar scores (9 or over) recorded at 5 minutes.

Source: National Community Child Health Database (NCCHD), Digital Health and Care Wales

APGAR score at 5 minutes (StatsWales)

[Note 1] The percentages are based on total live births with valid data for APGAR at 5 minutes. In 2022, there were 1,425 records with missing or invalid data for this data item.

In 2022, the large majority (98%) of live births had an APGAR score of 7 or over at 5 minutes, including 78% of babies who had a score of 10.

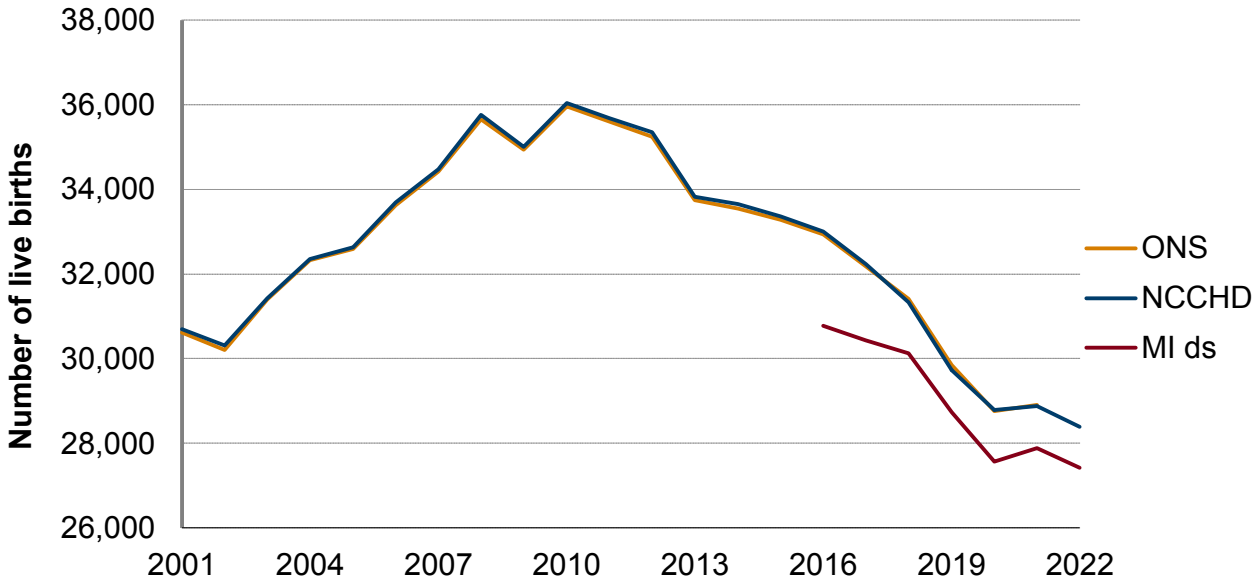
Quality and methodology information

More detailed information on the sources of data and analyses in this statistical release are provided in the **quality report**. This includes a table showing the percentage of valid data recorded for selected data items in both source datasets.

Coherence of data sources for births in Wales

Figure 33 shows how the number of births in Wales compares across the main data sources. Data from the National Community Child Health Database (NCCHD) has very good coverage and completeness, with the number of births closely aligning to **birth registration statistics by ONS**. Maternity Indicators dataset (MI ds) was established in 2016 and the number of births differs from the other two sources primarily because it does not include births to Welsh residents in English hospitals.

Figure 34: Live births in Wales, by data source, 2001 to 2022 [Note 1] [Note 2]



Description of Figure 34: Line chart showing close alignment between the number of births from National Community Child Health Database and Office for National Statistics. Births from the Maternity Indicators dataset are lower but follow a similar trend.

Source: Maternity Indicators dataset (MI ds), National Community Child Health Database (NCCHD), Office for National Statistics (ONS)

Live births in Wales by data source (StatsWales)

[Note 1] Y axis does not start at zero

[Note 2] At the time of publication, the latest available ONS births data is from 2021, but data is available for 2022 in both the Maternity Indicators dataset and National Community Child Health Database.

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural wellbeing of Wales. The Act puts in place seven wellbeing goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators ("national indicators") that must be applied for the purpose of measuring progress towards the achievement of the wellbeing goals, and (b) lay a copy of the national indicators before Senedd Cymru. Under section 10(8) of the Well-being of Future Generations Act, where the Welsh Ministers revise the national indicators, they must as soon as reasonably practicable (a) publish the indicators as revised and (b) lay a copy of them before the Senedd. These national indicators were laid before the Senedd in 2021. The indicators laid on 14 December 2021 replace the set laid on 16 March 2016.

This release includes 1 of the national indicators namely The percentage of live single births with a birthweight of under 2.5kg.

Information on the indicators, along with narratives for each of the wellbeing goals and associated technical information is available in the **Wellbeing of Wales report**.

Further information on the **Well-being of Future Generations (Wales) Act 2015**.

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local wellbeing assessments and local wellbeing plans.

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