ystadegau ar gyfer cymru statistics for wales

Statistical First Release

Llywodraeth Cymru Welsh Government

# Maternity and Birth Statistics, Wales 2019 (updated)

13 August 2020
SFR 114/2020

This report has been updated since publication on 28 May 2020 to include updated data on birth registrations from ONS. See notes for further detail. Statistics in this release provide an overview of maternity and births in Wales with analyses of mothers' characteristics. The data and analyses are used to inform Welsh's Government's maternity policy development. Note that the official source for births in Wales (and the UK) are ONS' births and registration statistics; however, using the Maternity Indicators dataset (MI ds) and National Community Child Health Database (NCCHD) allows us to produce a wider range of statistics relating to births in Wales.

**29,728**

live births in Wales in 2019

**4%**

of live births were to mothers aged under 20, in 2019; the lowest rate on record

## Main points

- At least 72% of women received their initial antenatal assessment before the end of their 10th week of pregnancy.
- 25% of women reported a mental health condition at their initial assessment.
- 28% of women were obese (BMI 30+) at their initial assessment.
- 17% of women were recorded as a smoker at initial assessment; 18% of these were not recorded as smokers at birth.
- 51% of labours started spontaneously while 33% were induced.
- 28% of births occurred via caesarean section, just under half of which were elective and just over half were emergencies.
- 6% of singleton births had low birthweight.
- 62% of mothers breastfed at birth, the highest on record.

## About this release

From 2019 onwards, statistics on maternity and births in Wales have been published in a single annual report, which has replaced two previous individual on maternity and births.

The two primary data sources for this release are the Maternity Indicators dataset (MI ds) and the National Community Child Health Database (NCCHD).

Statistics are provided on a range of topics including: the number of baby deliveries in Wales; smoking during pregnancy; mode of birth; gestation; birthweight; mothers' characteristics; and breastfeeding.

## In this release



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## The Maternity Indicators dataset

The Maternity Indicators dataset (MI ds) was established in 2016. The dataset combines a child's birth record with their mother's initial assessment record (where possible) and enabled Welsh Government to monitor its initial set of outcome indicators and performance measures (Maternity Indicators) which were established to measure the effectiveness and quality of Welsh maternity services. The dataset includes babies born at home, though they may not be identifiable in all health boards, but it does not include any baby born outside Wales, even if the mother resides in Wales.

A slightly different methodology has been introduced this year to include more records and the full back series of data has been revised on this basis (2016 to 2019). Data will be added to StatsWales in due course. As data has been newly extracted for all previous years, any resubmissions of data from health boards will be present in all years, so trends may have changed slightly from previously published data.

The dataset includes all birth records, and has only been linked to initial assessment data where the birth and the initial assessment took place in the same local health board. If an initial assessment took place in different health board to the birth or if the initial assessment could not be matched to a birth record, all data items which would have been collected through the initial assessment are missing.

Only matching initial assessment and birth records if they take place in the same health board is required to improve the data matching process, but results in limitations when using the data. The primary issue is that the same mother can have multiple initial assessment records because of the way in which health boards record data on initial assessments. This can happen for a number of reasons; for example, it is often the case that when a mother receives maternity services in her resident health board, but then gets referred to a different health board for additional maternity services, an 'initial' assessment gets generated in both health boards. This might mean that the mother's actual initial assessment took place earlier than it is recorded in the Maternity Indicators dataset. Furthermore, if a mother's initial assessment took place in a different health board to where she gave birth, only the birth record would be included in the Maternity Indicators dataset and all data items collected through the initial assessment would be missing. This may mean that the dataset is statistically biased, if the characteristics of the mother and babies not included in the dataset are different to those who are included. The methodology NWIS use for matching initial assessments and birth records is detailed in the Key Quality Information.

A further data quality issue for data referring to 2019 is caused by a change in the health board boundaries. As of April 2019 two new health boards were created (Cwm Taf Morgannwg and Swansea Bay) and two previous health boards ceased (Cwm Taf and Abertawe Bro Morgannwg). The difference between the new and old boundaries is that the local authority area of Bridgend moved out of the old Abertawe Bro Morgannwg health board and has now joined Rhondda Cynon Taf and Merthyr Tydfil in Cwm Taf Morgannwg. Swansea and Neath Port Talbot local authority areas form the new Swansea Bay health board. This has two major impacts on the data presented:

- Where an initial assessment took place in Bridgend prior to 1 April 2019, and the mother gave birth in Bridgend after 1 April 2019, the initial assessment and birth records could not be matched (as they are from different health boards). Therefore, only birth record data could be used in 2019 for these pregnancies. 1,351 (or 16% of) deliveries in these two areas are not matched to the initial assessment and a high proportion of these would be due to the health board boundary change.

- As the change happened during the reporting year, many of the tables and charts will include both health board areas because activity happened in the calendar year in both the new and old health boards. Therefore, data for Cwm Taf and Abertawe Bro Morgannwg will only refer to the time period 1 January to 31 March 2019 and data for Cwm Taf Morgannwg and Swansea Bay will only refer to data from 1 April to 31 December 2019.

As a result of the limitations of the data and as the Maternity Indicators dataset is still a relatively new and complex dataset, any statistics published from it are experimental statistics.

The database is maintained by the NHS Wales Informatics Service (NWIS) which extracts data from local health board systems on a daily basis. More information on the data items collected is available through the NWIS Data Dictionary.

The dataset includes all services provided in Wales, including antenatal care provided in Welsh maternity units and care of deliveries which occurred in Wales. This release profiles these services and therefore relates to any woman, wherever resident, who received care at delivery in Wales and the associated antenatal care. The local health boards referred to, therefore, are those where the care was provided (either antenatal or at delivery); the analyses are based on health board provider rather than health board of residence, unless stated otherwise.

The Welsh Government maternity vision: Maternity Care in Wales, A Five Year Vision for the Future (2019-2024) was published in July 2019.

## National Community Child Health Database (NCCHD)

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 and used by them to administer child immunisation and health surveillance programmes.

The well-established database was built in 2004 is maintained by the NHS Wales Informatics Service (NWIS). Statistics published from this source are official statistics, and full information on the data fields contained in the database are available through the NWIS Data Dictionary.

The statistics relate to live births born to Welsh residents during the relevant calendar year. The analyses are for live births only and do not include stillbirths.

In this release, no changes have been made to statistics previously published from the National Community Child Health Database, except for breastfeeding data at 10 days, 6 weeks and 6 months. Data for breastfeeding at these ages is now based on all children turning the reference age in the calendar year, rather than referring to children born in the calendar year. This change increases the number of children who could be counted at each reference age and should provide a better quality estimate. Previously published data from 2016 onwards has been re-worked on this basis and has been revised in this statistical release.

## What does the data show?

The number of births recorded on the National Community Child Health Database aligns closely to the number of births published by ONS birth registration statistics. There are slightly fewer births recorded in the Maternity Indicators dataset, largely because of the more complex way data is recorded.

At least seven in ten women received their initial antennal assessment before the end of their 10th week of pregnancy. (Chart 2)

A quarter (25%) of mothers reported that they had a mental health condition at their initial assessment, while a little over a quarter (28%) of mothers were obese (recorded as having a BMI of 30 or more). (Table 4)

Obesity rates at initial assessment varied greatly between health boards: the rate in Cwm Taf Morgannwg was more than double the rate in Powys. (Table 4)

Obesity rates were similar for most age groups but much lower in the youngest mothers (aged 19 or younger), and the percentage of women who reported mental health conditions at initial assessment was higher in younger mothers (aged 24 or younger). (Chart 4b and Chart 4c)

Just under one in five (17%) mothers were recorded as smokers at initial assessment. Smoking rates showed a clear trend of being higher in younger mothers and lower in older mothers; a third (32%) of women aged under 20 smoked while only just over a tenth (11%) of women aged over 35 smoked. (Table 6)

Of the mothers who were smoking at initial assessment, 18% were recorded as not being a smoker at birth. The percentage of women who 'stopped smoking' during pregnancy varied between 1 in 20 women (5%) in Swansea Bay to almost 1 in 4 women (23%) in Aneurin Bevan. (Table 7)

In total around one in six mothers (16%) were recorded as being smokers at birth. (Table 6)

Half (51%) of all labours began spontaneously, while a further third (33%) were induced. Induction rates were highest in Betsi Cadwaladr. (Table 8)

More than 6 out of 10 births (62%) arrived spontaneously, with nearly 3 out of 10 (28%) arriving via caesarean section. (Table 10)

There was close to an even number of elective caesarean and emergency caesarean sections across Wales, with some small variation across health boards. Cwm Taf/Cwm Taf Morgannwg had the highest rate of elective caesarean section (19%) while Swansea Bay had the highest rate of emergency caesarean section (17%). (Chart 13)

Just over a fifth (23%) of all mothers had an epidural administered. This varied between health boards with the percentage of mothers receiving an epidural in Cardiff and Vale (32%) almost twice as high as in Hywel Dda (17%). Aneurin Bevan had a high proportion of missing data (63%). (Table 9)

The recent downward trend (since 2010) in the number of live births in Wales has continued; the number of live births has decreased every year since 2010. (Chart 1)

Most births occurred in Betsi Cadwaladr health board, but the hospitals where the largest number of births occurred were the University Hospital of Wales (Cardiff and Vale) and Royal Gwent Hospital (Aneurin Bevan). (Table 3)

The percentage of births to younger mothers (under 20) remained at the lowest on record and has fallen every year since 2004. (Chart 10)

The percentage of home births rose (slightly) in 2019 for the first time in five years. The percentage of home births in Powys were more than double any other health board area. (Chart 15 and Chart 16)

Half (51%) of births occurred within one week either side of the typical expected due date (gestational age of 39 to 40 weeks); while 1 in 12 births arrived with a gestational age of 36 weeks or less and 1 in 25 births arrived where gestational age was 42 weeks or more. (Chart 17)

The percentage of singleton live births with a low birthweight (less than 2.5kg) has remained relatively stable at the Wales level over the longer and shorter term, but has some variation at health board level. (Chart 20 and Chart 21)

The percentage of singleton low birthweight babies was slightly higher in babies from ethnic minority groups than babies from white ethnic groups. (Table 12)

Three-fifths (59%) of babies born in multiple births (twins and triplets) weighed less than 2.5kg. (Table 12)

Low birthweights are closely linked to gestational age; the percentage of low birthweight babies decreased as gestational age increased. (Chart 26)

Both gestational age and low birthweight differed by age group, with a lower percentage of pre-term and low birthweight babies being born to mothers in middle age groups (20 to 39). (Chart 27)

The percentage of healthy births (meeting all ten criteria under the Welsh Government clinical definition) had risen slightly since the previous year. (Table 13)

The percentage of mothers who were recorded as intending to breastfeed fell slightly since the previous year, but the percentage of mothers actually breastfeeding at birth was at its highest level on record (just over 6 out of 10 mothers breastfeeding). (Chart 28)

Breastfeeding rates at 10 days continued to improve slightly, while breastfeeding at 6 weeks continued to decline very slightly. Breastfeeding at 6 months is affected by low data coverage but remained at around 1 in 5 mothers using any breastfeeding. (Chart 28)

A greater proportion of first-time mothers intended to breastfeed than mothers who had one previous child, who in turn had a greater proportion of mothers who intended to breastfeed than mothers who had two or more previous children. (Chart 30)

Older mothers (aged 30 and above) had higher breastfeeding rates than younger mothers and mothers who gave birth at home had higher breastfeeding rates than those with hospital births. (Chart 31)

Breastfeeding rates at birth varied by health board from just over three quarters (77%) of mothers in Powys compared to just over half (56%) of mothers in Cwm Taf Morgannwg. (Chart 33)

The majority of babies (over 98%) had an APGAR score of 7 or over at 5 minutes. (Chart 35)

## Context

The official source of births data in Wales is published by the ONS, which counts birth registrations. This release focusses on statistics for births using data sourced from Maternity Indicators dataset and the National Community Child Health Database, which allow for more detailed analysis than the ONS data. The number of births will differ between these sources as they are collected on a different basis.

Chart 1 shows how birth data in Wales compares across the main data sources. Data from the National Community Child Health Database has very good coverage and completeness, with the number of births closely aligning to birth registration statistics by ONS. Maternity Indicators dataset offers data from 2016 onwards and differs from the other two sources for reasons outlined in the Key Quality Information.

Maternity Indicators dataset recorded 28,471 deliveries in Welsh hospitals, which could be matched to 26,949 initial assessment (antenatal) records. This means that any statistics included in this release relating to birth characteristics only, will include data from 1,522 deliveries which are not included in any analysis which requires data to be matched from the birth and initial assessment records (for example, mothers giving up smoking) or analysis which only requires initial assessment data (for example, gestational age of initial assessment).

Table 1 shows the 28,471 recorded deliveries in the Maternity Indicators dataset resulted in 28,728 live births. National Community Child Health Database recorded 29,728 live births in 2019 to Welsh residents, while ONS data (published in July 2020) shows that there were 29,704 live births registered in 2019.

All births occurring in Wales (whether to Welsh or non-Welsh residents) from the National Community Child Health Database are shown in Table 2 and also by maternity unit on StatsWales.

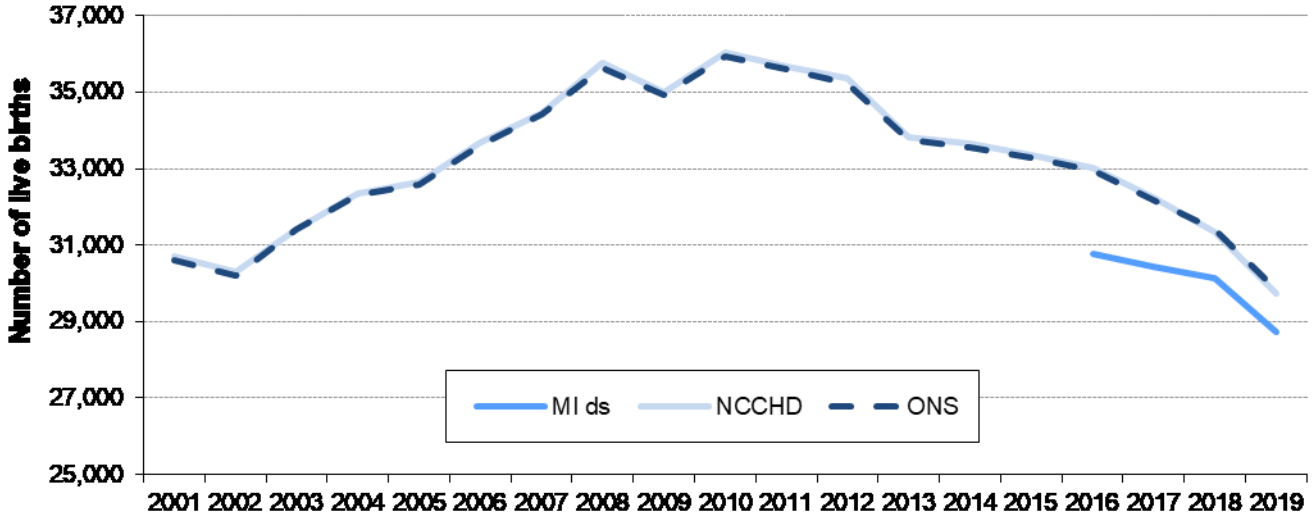
**Table 1: Comparison of births by data source and health board provider, 2019**

| | MI dataset (a) | | | | | NCCHD (b) | | | ONS (b) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Antenatal records (c) | Deliveries (c) (d) (e) | Live births | Still births (f) | Total births (g) | Live births (h) | Still births (f) | Total births (h) | Live births | Still births (f) | Total births |
| Betsi Cadwaladr | 5,922 | 5,968 | 6,016 | 36 | 6,054 | 6,350 | 37 | 6,387 | 6,355 | 36 | 6,391 |
| Powys | 211 | 211 | 211 | 0 | 211 | 1,014 | 4 | 1,018 | 1,034 | 4 | 1,038 |
| Hywel Dda | 2,958 | 3,045 | 3,059 | 16 | 3,075 | 3,201 | 15 | 3,216 | 3,229 | 15 | 3,244 |
| Abertawe Bro Morgannwg | 2,955 | 1,329 | 1,335 | 7 | 1,342 | 1,230 | 6 | 1,236 | . | . | . |
| Swansea Bay | 619 | 2,663 | 2,697 | 8 | 2,706 | 2,669 | 2 | 2,671 | 3,527 | 16 | 3,543 |
| Cwm Taf | 2,517 | 844 | 846 | 4 | 850 | 797 | 4 | 801 | . | . | . |
| Cwm Taf Morgannwg | 978 | 3,584 | 3,617 | 15 | 3,632 | 3,310 | 10 | 3,320 | 4,499 | 20 | 4,519 |
| Aneurin Bevan | 5,568 | 5,594 | 5,661 | 30 | 5,691 | 6,098 | 27 | 6,125 | 6,121 | 25 | 6,146 |
| Cardiff and Vale | 5,221 | 5,233 | 5,286 | 22 | 5,309 | 4,976 | 21 | 4,997 | 4,939 | 22 | 4,961 |
| **Wales** | **26,949** | **28,471** | **28,728** | **138** | **28,870** | **29,728** | **126** | **29,854** | **29,704** | **138** | **29,842** |

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

(a) Deliveries / births in Welsh hospitals.
(b) Births to Welsh residents only (includes births in English hospitals).
(c) This relates to deliveries in 2019. Note the initial assessment may have taken place in 2018. Pregnancies resulting in multiple births are counted once in this total.
(d) Includes delivery of live and still births.
(e) Includes an additional 1,522 deliveries which could not be linked to an initial assessment record, of which 1,351 are in Cwm Taf or Swansea Bay most of which would be affected by the health board change during the year.
(f) Note that the pattern of still births across health boards may be affected by the location of the tertiary referral centre for foetal medicine in Cardiff.
(g) Includes 4 births with no stated outcome.
(h) Includes 83 births where health board was not stated.

## Chart 1: Live births in Wales, by data source (2001 to 2019)




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

## Table 2: Live births to Welsh and non-Welsh residents by place of birth, 2019

| | Births in Wales | | | | Births outside Wales | |
|---|---|---|---|---|---|---|
| | Hospital | Home | Ambulance | Not stated | English Hospital | **All live births** |
| Births to Welsh residents | 28,056 | 719 | 40 | 165 | 748 | **29,728** |
| Births to non-Welsh residents | 326 | 0 | 0 | 0 | .. | **326** |

Source: National Community Child Health Database

.. Data item not available.

More information about births in English hospitals is available at: Maternity statistics for England.

Table 2 shows that the vast majority of live births to Welsh residents took place in Welsh hospitals in 2019 but 748 (or 2.5% of) live births to Welsh residents were delivered in English hospitals. 53% of these were from mothers resident in Flintshire, 35% from Powys and 5% from Wrexham. A further 326 babies whose mothers were non-Welsh residents were delivered in Welsh hospitals.

See Table 15 for a breakdown by health board.

## Deliveries and births at maternity units

### Table 3: Delivery and birth (a) records by health board providing the service and maternity unit, 2019

| | MI dataset | | NCCHD |
|---|---|---|---|
| | Deliveries (a)(d) | Births (a)(b)(d) | Births (b)(c)(d) |
| **Betsi Cadwaladr** | **5,968** | **6,054** | **6,171** |
| Wrexham Maelor Hospital | 2,382 | 2,412 | 2,410 |
| Ysbyty Glan Clwyd | 2,013 | 2,050 | 2,038 |
| Ysbyty Gwynedd | 1,573 | 1,592 | 1,718 |
| **Powys Teaching** | **211** | **211** | **125** |
| Breconshire War Memorial Hospital | 39 | 39 | 40 |
| Knighton Hospital | 11 | 11 | 10 |
| Llandrindod Wells Hospital | 11 | 11 | 10 |
| Llanidloes And District War Memorial Hospital | 12 | 12 | 11 |
| Montgomeryshire County Infirmary | 34 | 34 | 33 |
| Victoria Memorial Hospital | 20 | 20 | 20 |
| **Hywel Dda** | **3,045** | **3,075** | **2,973** |
| Bronglais General Hospital | 435 | 435 | 430 |
| Glangwili General Hospital | 2,420 | 2,450 | 2,398 |
| Withybush General Hospital | 190 | 190 | 145 |
| **Swansea Bay** | **3,494** | **3,548** | **3,480** |
| Neath Port Talbot Hospital | 347 | 347 | 305 |
| Singleton Hospital | 3,146 | 3,200 | 3,175 |
| **Cwm Taf Morgannwg** | **4,926** | **4,982** | **4,924** |
| Prince Charles Hospital | 2,499 | 2,531 | 2,542 |
| Princess Of Wales Hospital | 1,899 | 1,919 | 1,949 |
| The Royal Glamorgan Hospital | 431 | 434 | 431 |
| **Aneurin Bevan** | **5,594** | **5,691** | **5,598** |
| Nevill Hall Hospital | 1,815 | 1,844 | 1,834 |
| Royal Gwent Hospital | 3,502 | 3,570 | 3,517 |
| Ysbyty Ystrad Fawr | 275 | 275 | 246 |
| **Cardiff and Vale** | **5,233** | **5,309** | **5,230** |
| University Hospital Llandough | 0 | 0 | 6 |
| University Hospital of Wales | 5,233 | 5,309 | 5,223 |
| **Wales** | **28,471** | **28,870** | **28,501** |

Source: Maternity Indicators dataset, National Community Child Health Database (NCCHD)

(a) Health board totals include deliveries and births where the specific maternity unit was not stated. This includes: Powys 83 deliveries and 83 births; Swansea Bay 1 delivery; Aneurin Bevan 2 deliveries; and Cwm Taf Morgannwg 97 deliveries and 98 births.
(b) Live and still births, includes births to non-Welsh residents.
(c) Health board totals include births where the specific maternity unit was not stated. This includes: Betsi Cadwaladr 5 births; Powys 1 birth; Cwm Taf Morgannwg 2 births; Aneurin Bevan 1 birth; and Cardiff and Vale 1 birth.
(d) Total for Cwm Taf Morgannwg contains 498 deliveries and 500 births recorded in the MI dataset at Prince Charles Hospital in Bridgend, which would have taken place between 1st January and 31st March 2019 under the old Abertawe Bro Morgannwg University health board.

The highest number of births occurred in University Hospital of Wales, Cardiff while the fewest occurred in University Hospital Llandough, Cardiff. A map showing all maternity units, highlighting all areas of Wales within a 20 mile driving distance is included at Map 1 and a second map showing all areas within a 40 minute drive-time is at Map 2 in Annex 4. Births by local authority area are included at Table 15.

## Antenatal care 2019

Data presented here refers to the 26,949 initial assessment records (or pregnancies) included in the Maternity Indicators dataset in 2019.

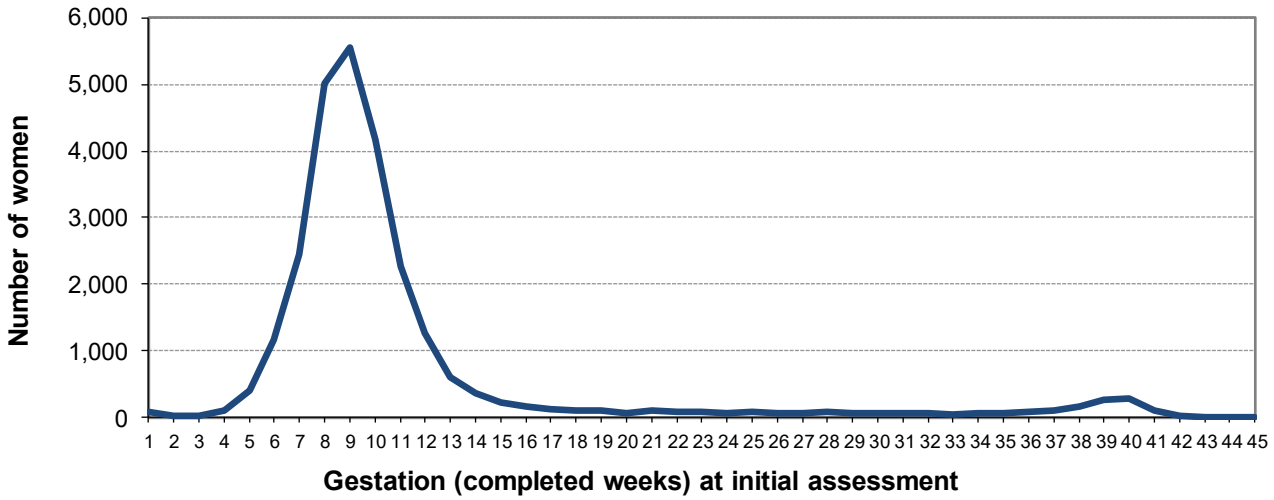
### Initial assessments

The 'proportion of women whose initial assessment has been carried out by 10 completed weeks of pregnancy' was one of the original Welsh Government Maternity Indicators. The rationale for this indicator is that early access to maternity services increases the opportunity to promote and improve the health and well-being of pregnant women through early sign-posting to appropriate services and provision of evidence based information.

In 2019, at least 72% of women who had an initial assessment ('booked in') with maternity services had received it on the 10th completed week of pregnancy or earlier. One percentage point lower than in 2018.

Note that some women may have had their first initial assessment before the date that has been recorded in the Maternity Indicators dataset. This is because the merging methodology for the initial assessment and birth record is based on when these occur in the same health board; so a mother could have an initial assessment in one health board, early in the pregnancy, but then if she goes into labour in another health board for any reason (for example, unexpected complications, or in a different health board area at the time) she will have another initial assessment record generated at the second health board where she gives birth. This may explain the small peak around 39 and 40 weeks in Chart 2.

**Chart 2: Number of women having their initial assessment by week of gestation, Wales, 2019**




Source: Maternity Indicators dataset, excludes 721 records where the gestation at initial assessment was not recorded

The large majority of initial assessments (83%) took place between 6 and 12 completed weeks gestation.

### Characteristics of women at initial assessment

In addition to the percentage of women who had an initial assessment before the 10th completed week of pregnancy, Table 4, Table 5, Chart 3 and Chart 4 show some key statistics for women at initial assessment. These include the proportion who have a Body Mass Index (BMI) of 30 or greater and the proportion of women who reported a mental health condition.

## Table 4: Antenatal care: key statistics by health board providing the service, 2019

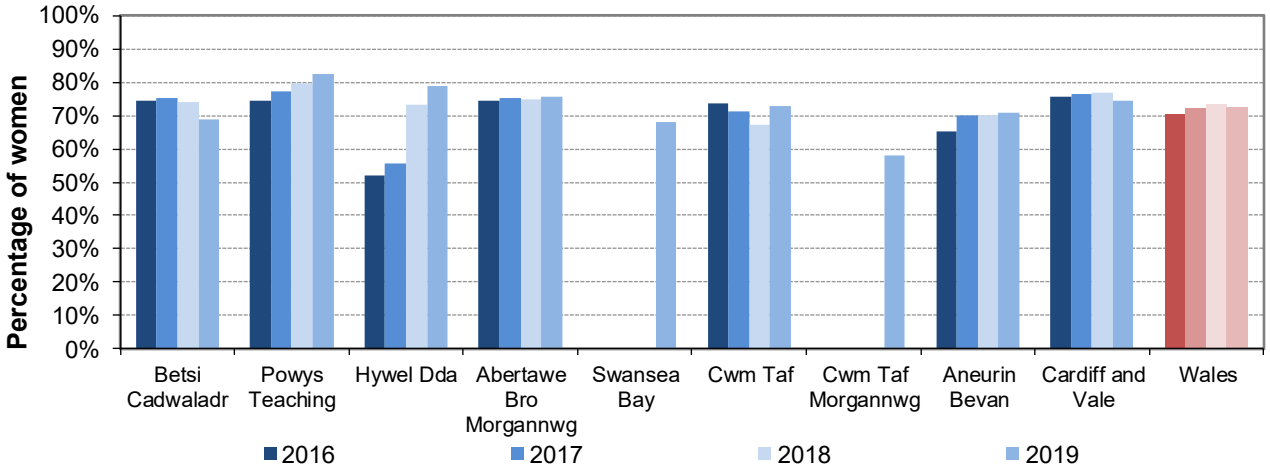
| Percentage (a) of women at intial assessment who: | Had an initial assessment carried out by 10 completed weeks of pregnancy | Had reported a mental health condition (b)(c) | Had a BMI 30+ |
|---|---|---|---|
| | | | *Per cent* |
| Betsi Cadwaladr | 68.9 | .. | 28.3 |
| Powys | 82.5 | 21.6 | 15.3 |
| Hywel Dda | 78.7 | 23.2 | 27.5 |
| Abertawe Bro Morgannwg | 75.8 | 33.9 | 27.0 |
| Swansea Bay | 68.0 | 38.1 | 28.6 |
| Cwm Taf | 72.7 | .. | 36.1 |
| Cwm Taf Morgannwg | 58.2 | .. | 33.8 |
| Aneurin Bevan | 71.0 | 20.1 | 29.5 |
| Cardiff and Vale | 74.4 | 24.8 | 24.9 |
| **Wales** | **72.3** | **25.1** | **28.4** |

Source: Maternity Indicators dataset

(a) The percentages for each indicator are of the total records less records with a 'not stated' value. In 2019, 721 records had no stated gestation at booking, 735 records had no stated mental health status, 1,436 records had no stated BMI (includes BMI values of less than 10 or greater than 100).
(b) Data provided for Cwm Taf/Cwm Taf Morgannwg and Betsi Cadwaladr appear not to be provided on the same basis as other health boards and are therefore not reliable enough for publication. While 99% of records had valid data entered, the large majority (more than 95%) were recorded as having no mental health condition which is unlikely to reflect the actual position in these health boards.
(c) Wales percentage excludes data from Betsi Cadwaladr and Cwm Taf/Cwm Taf Morgannwg because of their low reliability.

Note that the health board boundary change in April 2019 may have meant that more birth records have been matched to a later 'initial assessment' than the original initial assessment in both Swansea Bay and Cwm Taf Morgannwg. This may explain the fall in the percentage of women having their initial assessment carried out by 10 completed weeks of pregnancy, in both of these health board areas.

## Chart 3a: Percentage (a) of women who had an initial assessment by 10 completed weeks of pregnancy, by health board providing the service, 2016 to 2019




Source: Maternity Indicators dataset

(a) The percentages for each indicator are of the total records less records with a 'not stated' value:
- records with no stated gestation at booking (includes gestation stated as 0 weeks): 1,703 in 2016, 709 in 2017, 652 in 2018, 721 in 2019.

## Summary

Data completeness for this data item has been high throughout the four years of data, with over 90% completeness in all health boards in all years apart from Betsi Cadwaladr (79%) in 2016 and Aneurin

Bevan (89% and 88%) in 2018 and 2019. However analysis of this data item is limited by the merging methodology outlined in the Key Quality Information.

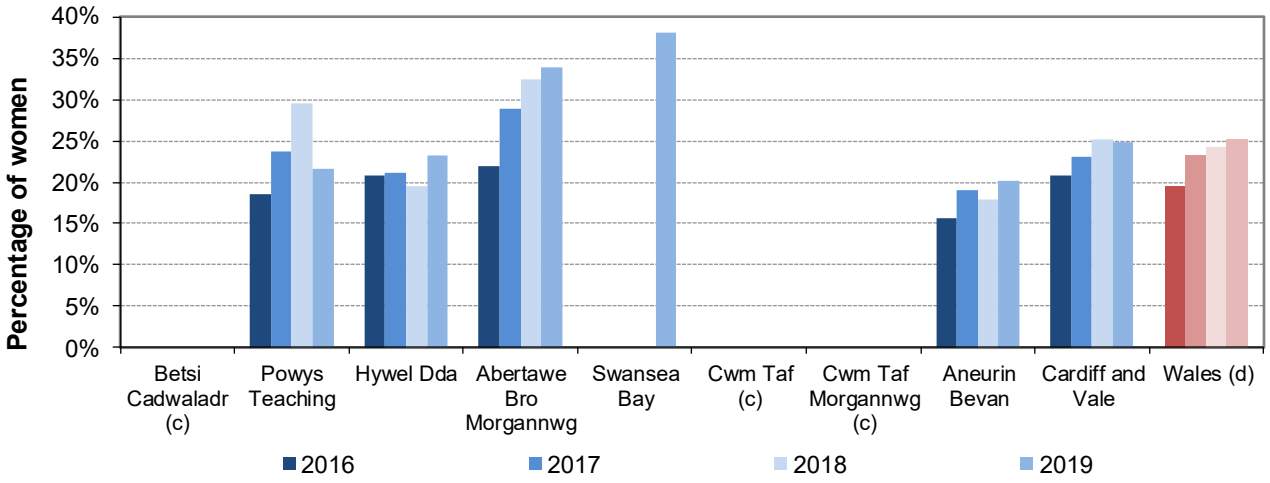
### Latest data

The proportion of women who had received an initial assessment with maternity services before the 10th completed week of pregnancy was 72% in Wales. Comparing health boards with full year data only, this varied from 69% at Betsi Cadwaladr to 82% in Powys.

### Annual change

The percentage of women receiving their initial assessment before the end of the 10th completed week fell by one percentage point in Wales. Of the five health boards with whole year data for 2018 and 2019, three had increases, with the largest increase in Hywel Dda (73% to 79%) and the largest decrease in Betsi Cadwaladr (74% to 69%).

**Chart 3b: Percentage (a) of women who had reported a mental health condition at initial assessment by health board providing the service (b), 2016 to 2019**




Source: Maternity Indicators dataset

(a) The percentages for each indicator are of the total records less records with a 'not stated' value:
- records with no stated mental health status: 3,549 in 2016, 1,321 in 2017, 1,028 in 2018, 735 in 2019.

(b) For a list of conditions which are included see glossary.

(c) Data provided for Cwm Taf/Cwm Taf Morgannwg and Betsi Cadwaladr appear not to be provided on the same basis as other health boards and are therefore not reliable enough for publication. While 99% of records had valid data entered, the large majority (more than 95%) were recorded as having no mental health condition which is unlikely to reflect the actual position in these health boards.

(d) Wales percentage excludes data from Betsi Cadwaladr and Cwm Taf/Cwm Taf Morgannwg because of their low reliability for all four years.

### Summary

Data completeness was 56% for Cardiff in 2016, and 88% in Hwyel Dda in 2016-2018. While data completeness was greater than 90% for all other health boards across all three years, there are reliability issues with how this data has been recorded in Betsi Cadwaladr and Cwm Taf/Cwm Taf Morgannwg.

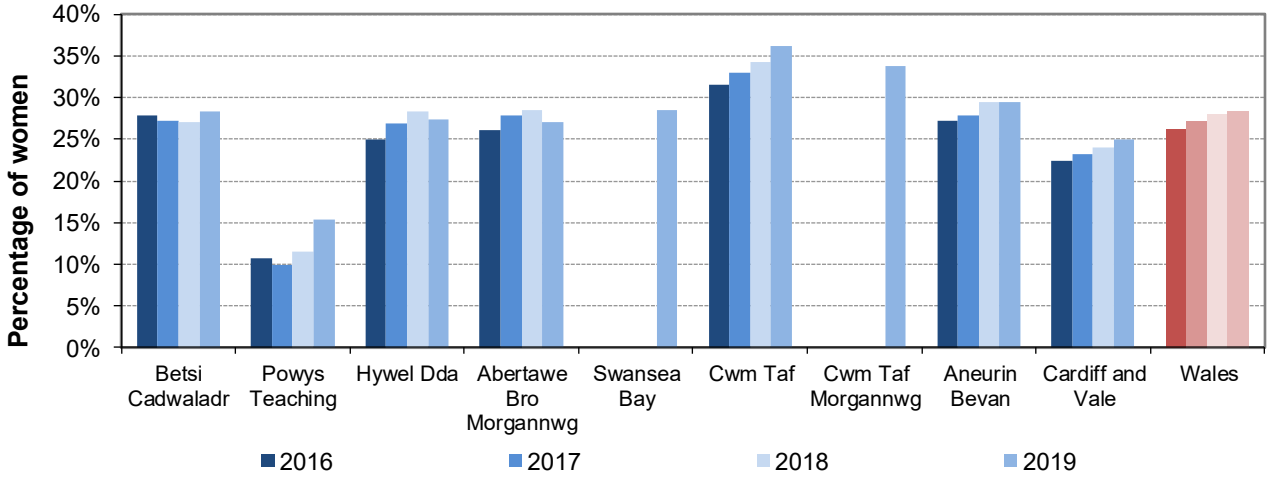
### Latest data

A quarter (25%) of mothers reported a mental health condition at their initial assessment. Excluding Cwm Taf and Betsi Cadwaladr data, this varied between 38% in Swansea Bay and 20% in Aneurin Bevan.

### Annual change

The proportion of women who reported having a mental health condition at their initial assessment increased by one percentage point in Wales. At health board level, the largest percentage point increase was in Hywel Dda (20% to 23%) and the largest percentage point decrease was in Powys (30% to 22%).

**Chart 3c: Percentage (a) of women who had a BMI of 30+ at initial assessment, by health board providing the service, 2016 to 2019**




Source: Maternity Indicators dataset

(a) The percentages for each indicator are of the total records less records with a 'not stated' value:
- records with no stated BMI (includes BMI values of less than 10 or greater than 100): 2,211 in 2016, 1,383 in 2017, 1,233 in 2018, 1,436 in 2019.
- records where weight was below 30kg and above 250kg and/or where height was under 120cm or above 200cm were classed as 'not stated'

## Summary

Completeness was above 90% for BMI in all health boards, across all years except for Cwm Taf in 2016 (77%), 2018 (88%) and in 2019 (86%) and Cwm Taf Morgannwg in 2019 (86%). Data for BMI is calculated based on heights and weights of the mother, however some of the records for these data items had unrealistic values and were excluded from the analysis.

## Latest data

Just over a quarter (28%) of mothers had a BMI of 30 or more at their initial assessment. This varied by health board, from 15% in Powys to 36% in Cwm Taf (Jan-Mar) and 34% in Cwm Taf Morgannwg (Apr-Dec).

## Annual change

The percentage of women who were recorded with a BMI of 30 or more increased marginally between 2018 and 2019 (from 28.0% to 28.4%). The rate increased in three out of five health boards which there is whole year data for, with no change in Aneurin Bevan and a one percentage point decrease in Hywel Dda.

A similar pattern of health board differences exist between smoking and BMI rates, suggesting a greater proportion of healthier lifestyle choices are being made by expectant mothers in Powys compared to those in Cwm Taf.

Table 5 highlights the differences in antenatal care statistics when comparing mothers by their age group. Note that there are less than 100 births each year to mothers aged under 16 and 45 or over, so statistics for these age groups may have large variations from year-to-year.

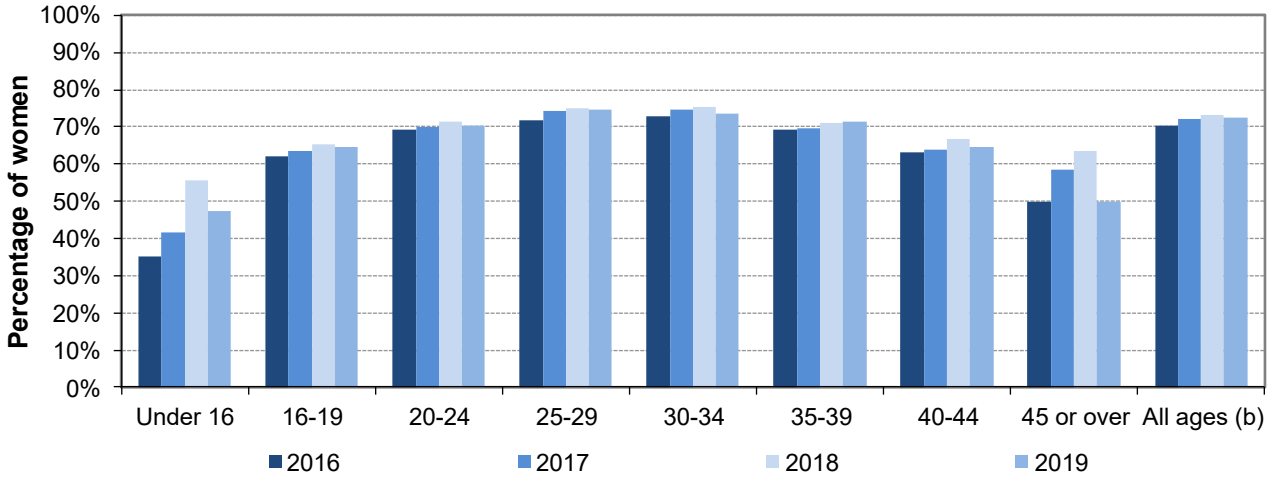
**Table 5: Antenatal care: key statistics by age of mother at initial assessment, Wales, 2019**

| **Percentage (a) of women at intial assessment who:** | | | *Per cent* |
|---|---|---|---|
| Age | Had an initial assessment carried out by 10 completed weeks of pregnancy | Had reported a mental health condition (b) | Had a BMI 30+ |
| Under 16 | 47.4 | 17.4 | 8.1 |
| 16-19 | 64.4 | 34.3 | 19.9 |
| 20-24 | 70.4 | 28.0 | 30.1 |
| 25-29 | 74.8 | 25.1 | 30.1 |
| 30-34 | 73.7 | 22.3 | 26.7 |
| 35-39 | 71.2 | 24.6 | 29.2 |
| 40-44 | 64.5 | 23.8 | 28.6 |
| 45 or over | 50.0 | 22.2 | 31.4 |
| **All ages (c)** | **72.3** | **25.1** | **28.4** |

Source: Maternity Indicators dataset

(a) The percentages for each indicator are of the total records less records with a 'not stated' value. In 2019, 721 records had no stated gestation at booking, 735 records had no stated mental health status, 1,436 records had no stated BMI (includes BMI values of less than 10 or greater than 100).
(b) Cwm Taf Morgannwg and Betsi Cadwaladr did not provide correctly recorded data for this data item so have been excluded from the analysis. Data for 'All ages' represents the remaining 6 health boards.
(c) 'All ages' includes records where mother's age was not stated.

**Chart 4a: Percentage (a) of women who had an initial assessment by 10 completed weeks of pregnancy, by age of mother, 2016 to 2019**




Source: Maternity Indicators dataset

(a) The percentages for each indicator are of the total records less records with a 'not stated' value:
- records with no stated gestation at booking (includes gestation stated as 0 weeks): 1,703 in 2016, 709 in 2017, 652 in 2018, 721 in 2019.

(b) 'All ages' includes records where mother's age was not stated.

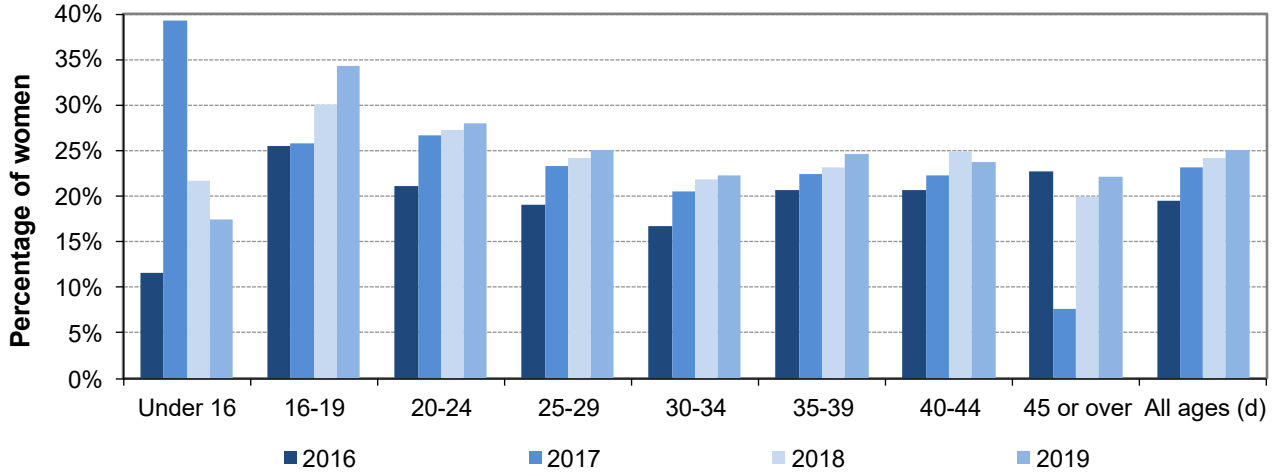
## Latest data

The proportion of women who had received an initial assessment with maternity services before the 10th completed week of pregnancy varied across age groups from just under half of the under 16 age group (47%) to three-quarters of mothers in their late 20s and early 30s (75% for mothers aged 25-29 and 74% for mothers aged 30-34).

## Annual change

The proportion decreased between 2018 and 2019 in all but one of the age groups. Considering age groups where more than 100 births occurred, the largest percentage point decrease was seen in the 40-44 age group (from 67% to 65%).

### Chart 4b: Percentage (a) of women who had reported a mental health condition at initial assessment, by age of mother (b)(c), 2016 to 2019




Source: Maternity Indicators dataset
(a) The percentages for each indicator are of the total records less records with a 'not stated' value:
- records with no stated mental health status: 3,549 in 2016, 1,321 in 2017, 1,028 in 2018, 735 in 2019.
(b) For a list of conditions which are included see glossary.
(c) Data for Cwm Taf/Cwm Taf Morgannwg and Betsi Cadwaladr is very unreliable and is unlikely to be accurate. In 2019, while 99% of records had valid data, the overwhelming majority (more than 95%) of their records were recorded as having no mental health condition which is unlikely to reflect the actual position in these health boards. 'All ages' percentage excludes data from Betsi Cadwaladr and Cwm Taf/Cwm Taf Morgannwg because of their low reliability for all three years.
(d) 'All ages' includes records where mother's age was not stated.

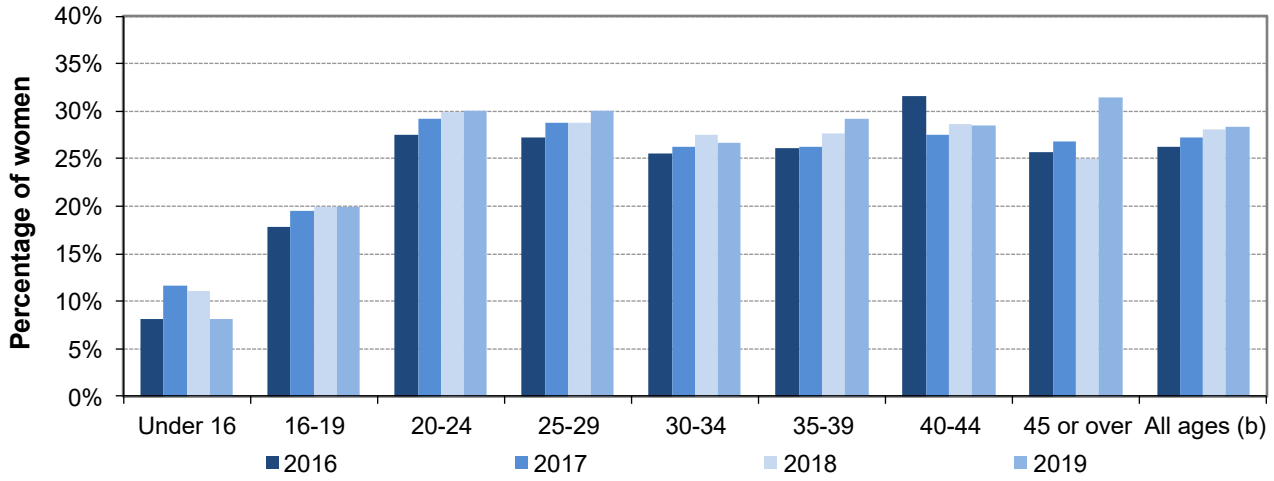
## Latest data

The proportion of women who reported a mental health condition at their initial assessment varied between age groups: considering only age groups where more than 100 births occurred, younger mothers (aged 16 to 24) had the highest rate of mental health conditions being recorded; while mothers aged 30 to 34 had the lowest rate. Note as there are few mothers aged under 16 and 45 or over, there may be large year-to-year changes due to natural volatility.

## Annual change

For most age groups, the proportion of women who reported a mental health condition increased slightly between 2018 and 2019, with the largest increase in mothers aged 16 to 19 (30% to 34%).

**Chart 4c: Percentage (a) of women who had a BMI of 30+ at initial assessment, by age of mother, 2016 to 2019**




Source: Maternity Indicators dataset

(a) The percentages for each indicator are of the total records less records with a 'not stated' value:
- records with no stated BMI (includes BMI values of less than 10 or greater than 100): 2,211 in 2016, 1,383 in 2017, 1,233 in 2018, 1,436 in 2019.

(b) 'All ages' includes records where mother's age was not stated.

## Latest data

The percentage of mothers with a BMI of 30 or more did not vary widely between most age groups; all age groups between 20 and 44 had rates between 27% and 30%. The youngest mothers aged 19 or less had the lowest percentage of BMI 30 or more.

## Annual change

There were generally small changes to the percentage of mothers whose BMI was 30 or more over the year for each age group. Of the age groups where more than 100 births occurred, the largest increase was in mothers aged 35-39 (2 percentage point increase) and the largest decrease in mothers aged 30-34 (1 percentage point decrease).

## Smoking at initial assessment and birth

During a woman's initial assessment and at birth, women are either asked if they are a smoker or they are tested with a carbon monoxide (CO) monitor. Table 6 shows the percentage of women in 2019 that were recorded as either smoking 'self-reported' or smoking 'CO confirmed' at their initial assessment and those recorded as smoking at birth.

Only the 26,949 birth records which could be linked to an initial assessment have been included in this analysis, to make comparisons at both points in time.

### Table 6: Percentage (a) of women who were smoking at initial assessment and at birth, by health board providing the service and age of mother (at initial assessment and birth), 2019 (b)

| | Percentage (a) of women who were smoking: | |
|---|---|---|
| | **At initial assessment** | **At birth** |
| *Health Board* | | *Per cent* |
| Betsi Cadwaladr | 20.5 | 18.2 |
| Powys | 13.7 | 10.0 |
| Hywel Dda | 16.9 | 19.3 |
| Abertawe Bro Morgannwg | 16.3 | 14.6 |
| Swansea Bay | 18.1 | 12.1 |
| Cwm Taf | 21.3 | 18.0 |
| Cwm Taf Morgannwg | 21.1 | 21.4 |
| Aneurin Bevan | 17.4 | 16.3 |
| Cardiff and Vale | 11.7 | 11.9 |
| **Wales** | **17.3** | **16.2** |
| *Age* | | |
| Under 16 | 21.1 | 25.0 |
| 16-19 | 32.2 | 30.5 |
| 20-24 | 26.0 | 24.8 |
| 25-29 | 17.7 | 16.5 |
| 30-34 | 12.0 | 12.1 |
| 35-39 | 11.9 | 11.7 |
| 40-44 | 10.4 | 8.4 |
| 45 or over | 2.9 | 4.0 |
| **All ages** | **17.3** | **16.2** |

Source: Maternity Indicators dataset

(a) The percentages for each indicator are of the total records less records with a 'not stated' value:
- records with no stated smoking status in 2019: 549 at initial assessment and 805 at birth.

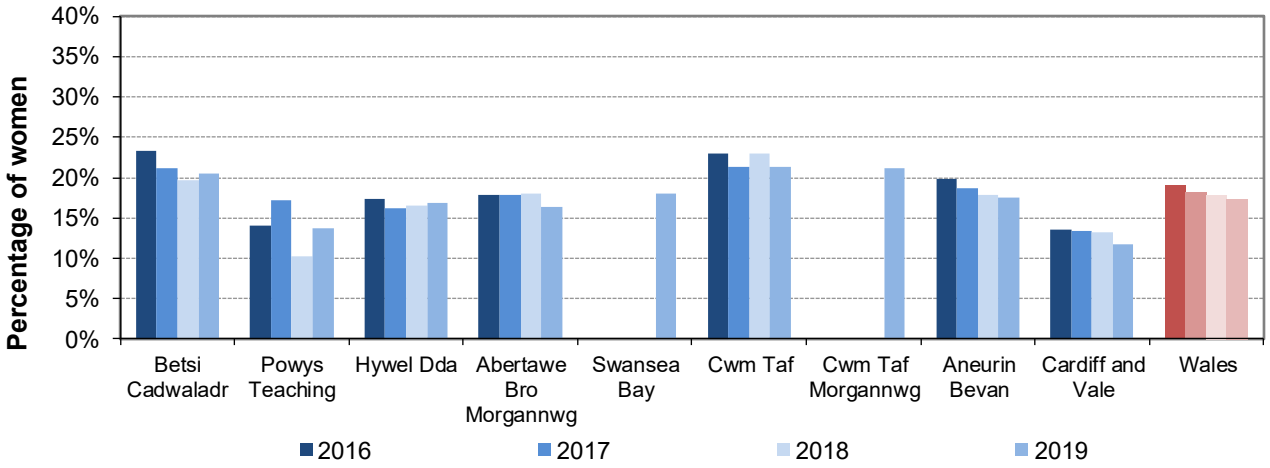
(b) Hywel Dda: Smoking rate is higher at birth than initial assessment; 8% of records did not have a valid smoking status at initial assessment compared to 1% of records at birth. All smoking statuses were self-reported at both initial assessment and at birth this health board.
Cwm Taf Morgannwg: Smoking rate is higher at birth than initial assessment; 2% of records did not have a valid smoking status at initial assessment compared to 16% of records at birth. All smoking statuses were self-reported at birth at this health board.
Cardiff and Vale: Smoking rate is higher at birth than initial assessment; 3% of records did not have a valid smoking status at initial assessment compared to less than 1% of records at birth. All smoking statuses were self-reported at birth at this health board.
Under 16's: Smoking rate is higher at birth than initial assessment; 0% of records did not have a valid smoking status at initial assessment compared to 5% of records at birth. All smoking statuses were self-reported at birth for this age group.
45 or over's: Smoking rate is higher at birth than initial assessment; 8% of records did not have a valid smoking status at initial assessment compared to 4% of records at birth.

## Note

Statistics on smoking at initial assessment and birth are limited by the way in which the data is collected. If CO monitoring is not available, data reliability is dependent on the mother giving accurate information. E-Cigarette use should in theory not be recorded in this data item and would not be detected by a CO

monitor; however in practice some mothers may self-report as a smoker if they use e-cigarettes and be recorded as a smoker.

**Chart 5: Percentage (a) of women who were smoking at initial assessment, by health board providing the service, 2016 to 2019**




Source: Maternity Indicators dataset
(a) The percentages for each indicator are of the total records less records with a 'not stated' value:
- records with no stated smoking status: 997 in 2016, 1,037 in 2017, 924 in 2018, 549 in 2019.

## Summary

Broadly, there has been a slight downward trend in the percentage of women smoking at the start of their pregnancy across Wales over the time series. Data completes is high for both smoking at initial assessment and at birth; all but one health board have 90% or over completeness across all years for both measures (Cwm Taf Morgannwg had 84% completeness at birth). Note that smoking statistics are limited by the way they are collected and rates may be different to those reported in previous years following health boards resubmitting data.

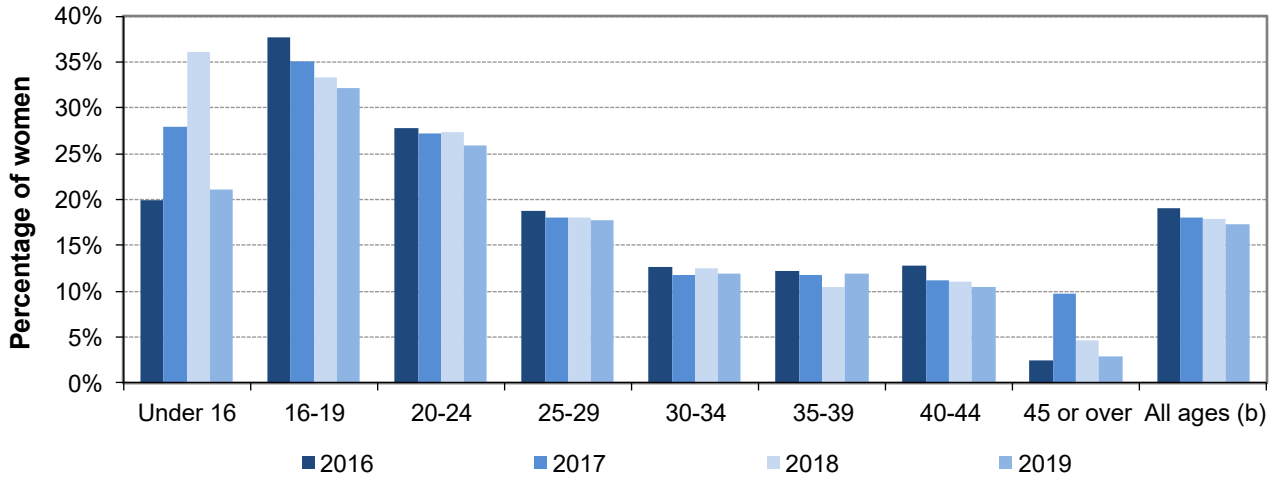
## Latest data

17% of women were recorded as being a smoker at their initial assessment. This varied between health boards from 12% in Cardiff and Vale to 21% in Cwm Taf (Jan-Mar) and Cwm Taf Morgannwg (Apr-Dec).

## Annual change

The percentage of women who were recorded as smoking at their initial assessment decreased marginally (less than one percentage point) between 2018 and 2019. At health board level, the largest increase was in Powys (10% to 13%), while the largest decrease was in Cardiff and Vale (13% to 12%).

**Chart 6: Percentage (a) of women who were recorded as smoking at initial assessment, by age of mother (at initial assessment), 2016 to 2019**




Source: Maternity Indicators dataset
(a) The percentages for each indicator are of the total records less records with a 'not stated' value:
- records with no stated smoking status: 997 in 2016, 1,037 in 2017, 924 in 2018, 549 in 2019.
(b) 'All ages' includes records where mother's age was not stated.

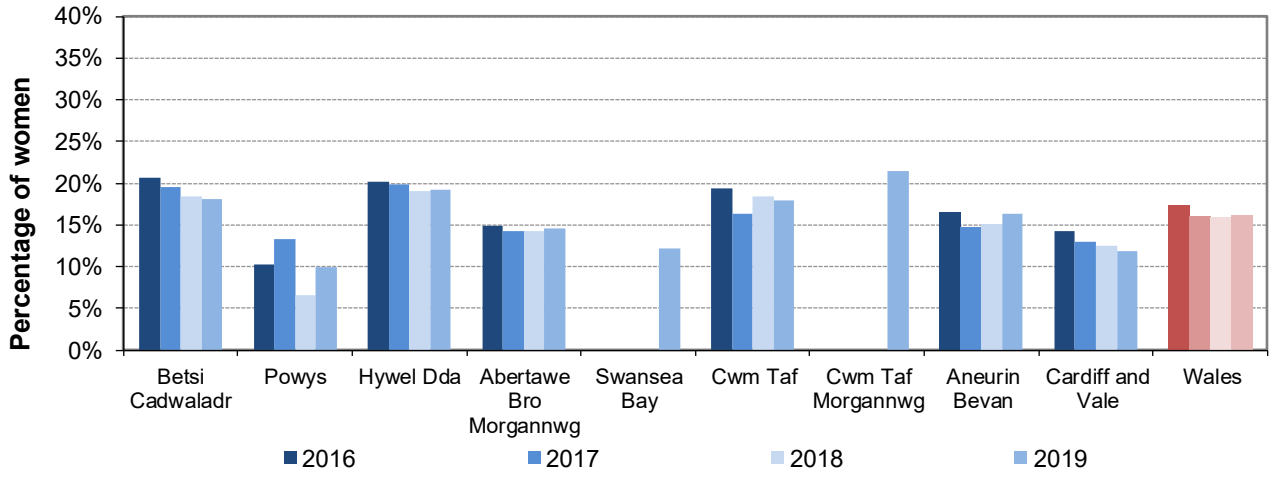
## Latest data

The proportion of women who smoked at initial assessment was higher for younger women. One-third (32%) of women aged 16 to 19 smoking at initial assessment compared to less than one-fifth (18%) of women aged 25 to 29, and one in ten (10%) women aged 40 to 44.

## Annual change

For the middle age groups, the proportion of women who smoked at initial assessment remained broadly the same between 2018 and 2019. Smoking rates fell by 15 percentage points in the Under 16's age group, but there were a small number of mothers in this age group.

**Chart 7: Percentage (a) of women who were recorded as smoking at birth, by health board providing the service, 2016 to 2019**




Source: Maternity Indicators dataset
(a) The percentage is of the total records less records with a 'not stated' value:
- records with no stated smoking status at birth: 891 in 2016, 861 in 2017, 519 in 2018, 805 in 2019.

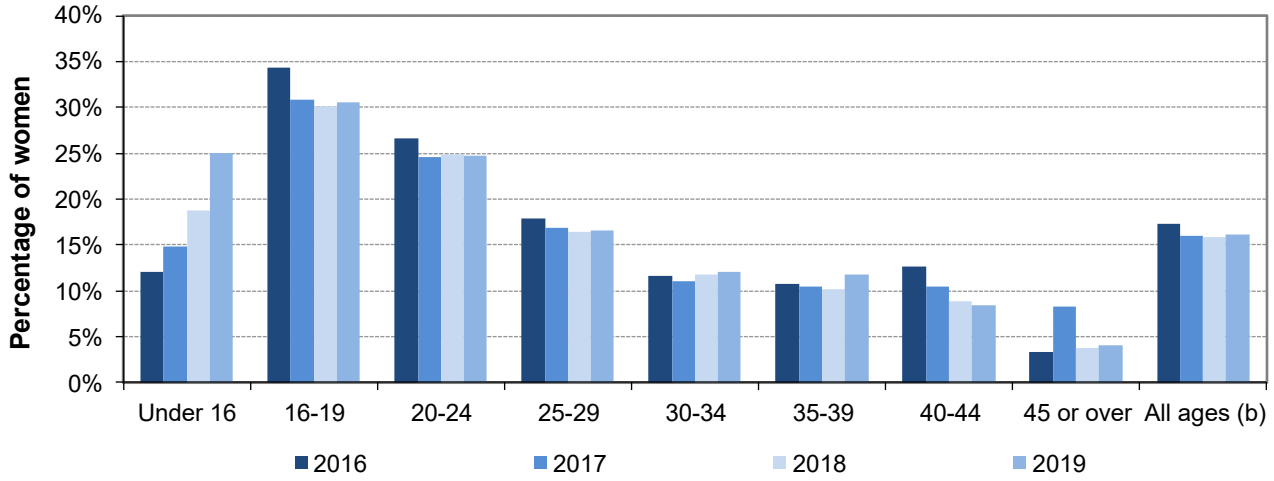
## Latest data

In Wales, around one in six mothers (16%) were recorded as being smokers at the time of birth in 2019. This varied between health boards from 10% in Powys to 21% in Cwm Taf Morgannwg (Apr-Dec).

## Annual change

The percentage of women who were recorded as smoking at the time of birth remained the same between 2018 and 2019. At health board level, the largest decrease was in Cardiff and Vale where the percentage of mothers smoking at birth fell from 13% to 12%, while the largest increase was in Powys (7% to 10%).

**Chart 8: Percentage (a) of women who were recorded as smoking at birth, by age of mother (at birth), 2016 to 2019**




Source: Maternity Indicators dataset
(a) The percentage is of the total records less records with a 'not stated' value:
- records with no stated smoking status at birth: 891 in 2016, 861 in 2017, 519 in 2018, 805 in 2019.
(b) 'All ages' includes records where mother's age was not stated.

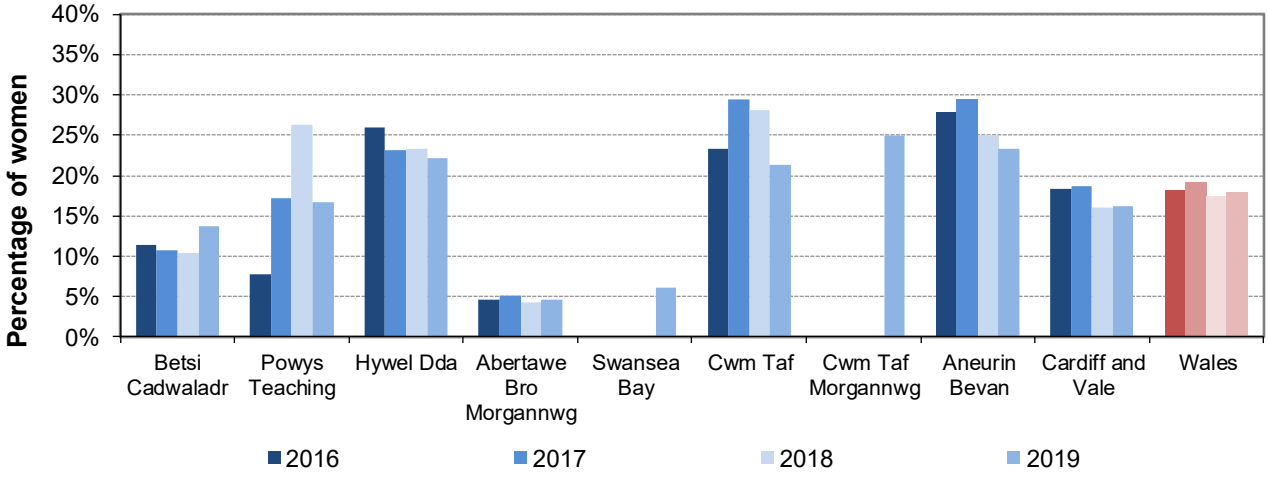
## Latest data

The proportion of women who smoked at the time of birth was much higher for younger mothers than older mothers. Just under a third (31%) of women aged 16 to 19 were smoking at birth compared to one-sixth (17%) of women aged 25 to 29 and under one tenth (8%) of women aged 40 to 44.

## Annual change

Of the age groups where there were more than 100 births, the proportion of women who smoked at initial assessment remained broadly the same between 2018 and 2019. The largest changes were in the 35 to 39 age group (two percentage point increase) and the 40 to 44 age group (half a percentage point decrease). The under 16 age groups saw more marked changes, but there were a small number of mothers in this age groups.

**Chart 9: Percentage (a) of women who 'stopped smoking' during pregnancy, by health board providing the service, 2016 to 2019**




Source: Maternity Indicators dataset
(a) The percentage is of the total records less records with a 'not stated' value at either initial assessment, birth or both:
- records with no stated smoking status at: 1,551 in 2016, 1,622 in 2017, 1,304 in 2018 and 1,256 in 2019.

## Summary

This analysis is based on women who had valid smoking data at both initial assessment and birth. Data is good at the Wales level (over 94% complete in each year) and generally good across most health boards (lowest level of completeness in the times series is Cwm Taf Morgannwg in 2019 with 83% complete records).

As smoking status is recorded at two points in time only, we do not know if the mothers were smoking throughout the duration of their pregnancy, or how frequently they smoked. For the purpose of the analysis, those mothers who were recorded as smoking at initial assessment but not smoking at birth are classed as mothers who 'stopped smoking' during pregnancy.

## Latest data

In 2019, 18% of women who were smokers at the initial assessment were not smokers at birth. The percentage varies greatly between health boards, ranging from around 1 in 18 women (6%) at Swansea Bay to around 1 in 4 women (25%) at Cwm Taf Morgannwg.

## Annual change

The percentage of women who gave up smoking increased marginally (by 0.4 percentage points) between 2018 and 2019. At health board level, the largest annual change was in Powys where the percentage of mothers who gave up smoking fell from 26% to 17%.

**Table 7: Summary of smoking status changes between initial assessment and birth, 2019**

| | Percentage of women who were smoking at intial assessment who: | | Percentage of women who were NOT smoking at intial assessment who: | | |
|---|---|---|---|---|---|
| | Were smoking at birth | Were not smoking at birth | Were not smoking at birth | Were smoking at birth | Completeness of data (a) |
| Betsi Cadwaladr | 86.3 | 13.7 | 99.1 | 0.9 | 98.5 |
| Powys Teaching | 83.3 | 16.7 | 100.0 | 0.0 | 94.8 |
| Hywel Dda | 77.9 | 22.1 | 92.6 | 7.4 | 91.3 |
| Abertawe Bro Morgannwg | 93.9 | 6.1 | 100.0 | 0.0 | 95.6 |
| Swansea Bay | 95.4 | 4.6 | 100.0 | 0.0 | 94.8 |
| Cwm Taf | 75.1 | 24.9 | 96.0 | 4.0 | 83.4 |
| Cwm Taf Morgannwg | 78.7 | 21.3 | 97.9 | 2.1 | 99.4 |
| Aneurin Bevan | 76.6 | 23.4 | 96.4 | 3.6 | 97.3 |
| Cardiff and Vale | 83.8 | 16.2 | 97.7 | 2.3 | 97.2 |
| **Wales** | **82.2** | **17.8** | **97.4** | **2.6** | **95.3** |

Source: Maternity Indicators dataset

(a) The percentage is of the total records less records with a 'not stated' value at either initial assessment, birth or both:

- records with no stated smoking status at: 1,256 in 2019.

## Care at delivery: Delivery characteristics

Data here refers to the 28,471 deliveries recorded in the Maternity Indicators dataset which took place in 2019.

### Onset of labour

Onset of labour is the method by which the process of labour began and includes methods that are used to induce labour, such as surgical or medical induction or a combination of the two. Methods that are used to accelerate labour are not included. For more information see glossary.

Data was recorded in the Maternity Indicators dataset for every health board; however in Hywel Dda and Aneurin Bevan health boards labour onset was not recorded as 'caesarean' when an elective caesarean section birth occurred. As a result of this data quality issue, these health boards have been excluded from the analysis and as a result data for Wales represents the 19,832 deliveries which took place at the remaining five health boards.

**Table 8: Mode of onset of labour by health board providing the service 2019**

| **Mode of onset:** | | | | | *Number* |
|---|---|---|---|---|---|
| | Spontaneous | Caesarean section (a) | Induction (b) | Not stated | **Total women** |
| Betsi Cadwaladr | 2,926 | 793 | 2,216 | 33 | **5,968** |
| Powys | 211 | 0 | 0 | 0 | **211** |
| Hywel Dda (c) | . | . | . | . | . |
| Abertawe Bro Morgannwg | 710 | 228 | 391 | 0 | **1,329** |
| Swansea Bay | 1,467 | 472 | 724 | 0 | **2,663** |
| Cwm Taf | 349 | 161 | 290 | 44 | **844** |
| Cwm Taf Morgannwg | 1,543 | 690 | 1,220 | 131 | **3,584** |
| Aneurin Bevan (c) | . | . | . | . | . |
| Cardiff and Vale | 2,734 | 834 | 1,655 | 10 | **5,233** |
| **Wales** | 9,940 | 3,178 | 6,496 | 218 | **19,832** |
| | | | | | *Per cent (d)* |
| Betsi Cadwaladr | 49.3 | 13.4 | 37.3 | | **100** |
| Powys Teaching | 100.0 | 0.0 | 0.0 | | **100** |
| Hywel Dda | . | . | . | . | . |
| Abertawe Bro Morgannwg | 53.4 | 17.2 | 29.4 | | **100** |
| Swansea Bay | 55.1 | 17.7 | 27.2 | | **100** |
| Cwm Taf | 43.6 | 20.1 | 36.3 | | **100** |
| Cwm Taf Morgannwg | 44.7 | 20.0 | 35.3 | | **100** |
| Aneurin Bevan | . | . | . | . | . |
| Cardiff and Vale | 52.3 | 16.0 | 31.7 | | **100** |
| **Wales** | **50.7** | **16.2** | **33.1** | | **100** |

Source: Maternity Indicators dataset

(a) 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.
(b) Includes medical induction, surgical induction and cases where a combination of both was used.
(c) 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 5 health boards.
(d) The percentages are of the total records less records with a 'not stated' value. In 2019, 1,287 of all records had no stated mode of onset of labour; 218 records (or 1.1%) had not stated mode of onset when only counted the 5 health boards used for Wales totals

Half (51%) of deliveries in Wales in 2019 began with a spontaneous onset of labour. This proportion varied across health boards, ranging from 44% in Cwm Taf (Jan-Mar) and 45% in Cwm Taf Morgannwg (Apr-Dec) to 53% in Abertawe Bro Morgannwg (Jan-Mar) and 55% in Swansea Bay (Apr-Dec). All deliveries in Powys (where there is no major hospital) started with a spontaneous onset of labour, as would be expected.

A third (33%) of deliveries in Wales started with an induction. At health board level, this ranged from 27% in Swansea Bay (Apr-Dec) and 29% in Abertawe Bro Morgannwg (Jan-Mar) to 37% in Betsi Cadwaladr.

## Pain relief

An epidural is a method of pain relief used for mothers in labour. It involves an injection of a 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.

Table 9 shows the number of deliveries in which an epidural was administered by health board.

## Table 9: Epidurals, by health board providing the service, 2019

| **Epidural** | | | | *Number* |
|---|---|---|---|---|
| | Epidural administered | Epidural not administered | Not stated | **Total deliveries (a)** |
| Betsi Cadwaladr | 1,266 | 4,679 | 23 | **5,968** |
| Powys | 0 | 211 | 0 | **211** |
| Hywel Dda | 513 | 2,532 | 0 | **3,045** |
| Abertawe Bro Morgannwg | 222 | 1,107 | 0 | **1,329** |
| Swansea Bay | 489 | 2,174 | 0 | **2,663** |
| Cwm Taf | 163 | 681 | 0 | **844** |
| Cwm Taf Morgannwg | 616 | 2,968 | 0 | **3,584** |
| Aneurin Bevan | 749 | 1,335 | 3,510 | **5,594** |
| Cardiff and Vale | 1,401 | 3,000 | 832 | **5,233** |
| **Wales** | 5,419 | 18,687 | 4,365 | **28,471** |
| | | | | *Per cent (b)* |
| Betsi Cadwaladr | 21.3 | 78.7 | | **100** |
| Powys | 0.0 | 100.0 | | **100** |
| Hywel Dda | 16.8 | 83.2 | | **100** |
| Abertawe Bro Morgannwg | 16.7 | 83.3 | | **100** |
| Swansea Bay | 18.4 | 81.6 | | **100** |
| Cwm Taf | 19.3 | 80.7 | | **100** |
| Cwm Taf Morgannwg | 17.2 | 82.8 | | **100** |
| Aneurin Bevan (c) | *35.9* | *64.1* | | **100** |
| Cardiff and Vale | 31.8 | 68.2 | | **100** |
| **Wales** | **22.5** | **77.5** | | **100** |

Source: Maternity Indicators dataset

(a) In the case of a delivery of a multiple birth, any mention of an epidural is counted.
(b) The percentages are of the total records less records with a 'not stated' value. In 2019, 4,365 records had no stated epidural status.
(c) Percentages for Aneurin Bevan are based on data which is only 38% complete and therefore may be unreliable.

In 2019, almost a quarter (22%) of women had an epidural for pain relief before or during delivery.

The majority of health boards had similar epidural rates at just under 20% of women, however the rate was higher in Cardiff where nearly a third of women received an epidural.

Note that epidural rates were highest in Aneurin Bevan; however data completeness for this data item is too low to compare directly with other health boards.

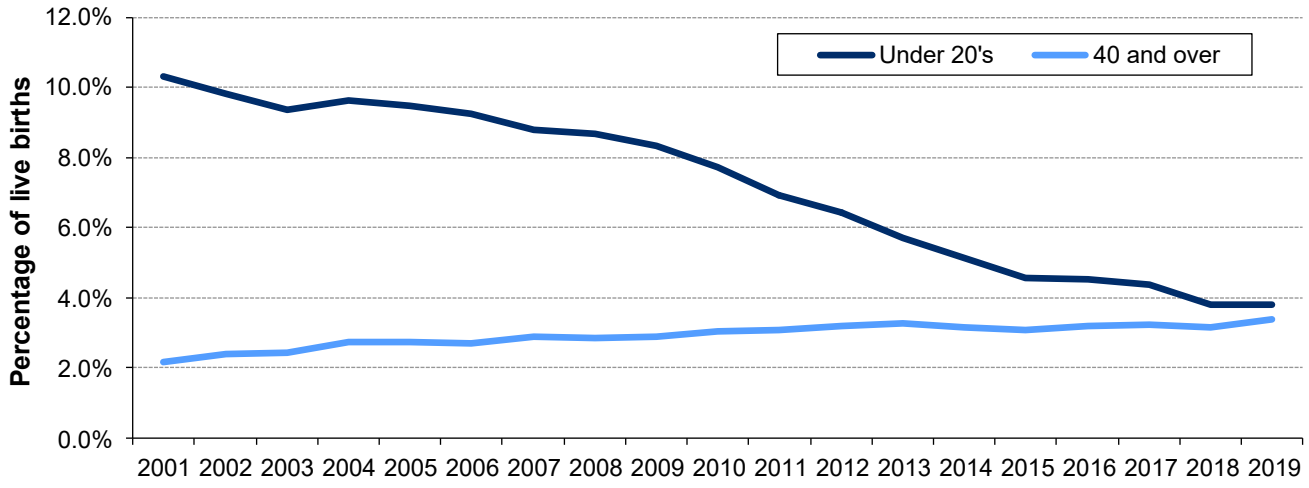
## Care at delivery: Birth characteristics

Data presented in this section focusses on the 28,870 births (live and still) recorded in the Maternity Indicators dataset which took place in 2019, as well as the 29,854 births (live and still) recorded in the National Community Child Health Database. Births are analysed rather than deliveries, since twins or triplets could be delivered by different means.

### Births by age of mother

Data for the following chart are available in Table 19 and on StatsWales. Data for teenage conceptions is published by ONS.

**Chart 10: Percentage of live births by age of mother, 2001 to 2019 (a)**




Source: National Community Child Health Database
(a) The percentages are of the total live births minus births with no stated mother's age. These are very few however with only 9 births having no mother's age stated in 2019.

**Summary**: The percentage of live births to mothers aged under 20 has fallen every year since 2004, while the percentage of live births to older mothers has increased slightly over the longer term. The vast majority of live births are born to women aged 20 to 39 (93% in 2019).

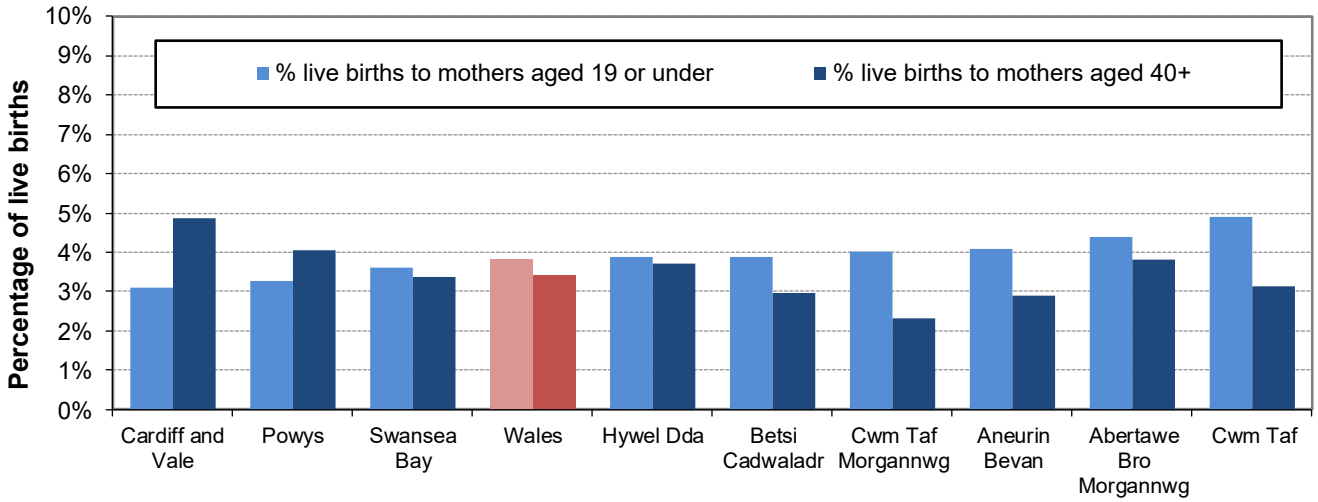
**Latest data**: 4% (or 1,129) of live births in 2019 were to mothers aged under 20; this is the lowest on record for both measures.
3% (or 1,012) of all live births in 2019 were to mothers aged 40 or older.

**Annual change**: There was little change over the year. The percentage of live births to younger mothers fell marginally (by less than 0.1 percentage points) since 2018 and the number of live births to younger mothers fell by 68. The percentage of live births to older mothers increased by 0.2 percentage points since 2018 and the number of live births to older mothers rose by 23.

**10 year change**: The percentage of live births to younger mothers fell by 4 percentage points since 2010, and the number of live births to younger mothers fell by 1,657. The percentage of live births to older mothers increased by 0.4 percentage points since 2009, but the number of live births to older mothers fell by 82.

**Change since first year of data:** The percentage of live births to younger mothers fell by 7 percentage points since 2001, and the number of live births to younger mothers fell by 2,028. The percentage of live births to older mothers increased by 1 percentage point since 2001, and the number of live births to older mothers increased by 347.

## Chart 11: Percentage of live births to mothers aged under 20 years and 40 years or over, by health board, 2019




Source: National Community Child Health Database
The percentages are of the total live births minus births with no stated mother's age. These are very few however with only 9 births having no mother's age stated in 2019.

Chart 11 shows that, of the health boards with data for the full year, Aneurin Bevan had the highest percentage of births to mothers under 20 years old (4%) and Cardiff and Vale the lowest (3%).

In contrast, of the health boards with data for the full year, Cardiff and Vale had the highest percentage of births to older mothers, aged 40 or over (5%) and Aneurin Bevan had the lowest (3%).

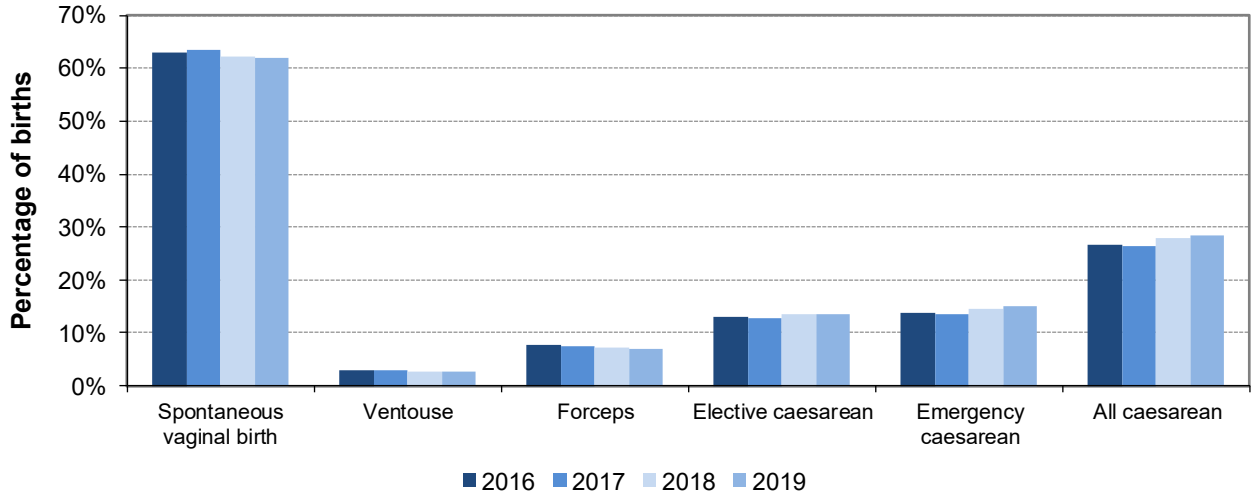
No adjustments are made for different age distributions in health board areas.

### Mode of birth

The three categories of mode of birth 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.

## Chart 12: Percentage (a) of births (live and still) by mode of birth, Wales, 2016 to 2019




Source: Maternity Indicators dataset
(a) The percentages are of the total records less records with a 'not stated' value. 46 records in 2016, 39 in 2017, 42 in 2018, 37 in 2019 had no stated mode of birth.

**Table 10: Mode of birth, by health board providing the service, Wales, 2019**

**Mode of birth:** *Number*

| | Spontaneous vaginal birth | Ventouse | Forceps | Elective caesarean | Emergency caesarean | Not stated | **Total births** |
|---|---|---|---|---|---|---|---|
| Betsi Cadwaladr | 3,746 | 236 | 372 | 714 | 984 | 2 | **6,054** |
| Powys | 211 | 0 | 0 | 0 | 0 | 0 | **211** |
| Hywel Dda | 1,821 | 115 | 210 | 442 | 487 | 0 | **3,075** |
| Abertawe Bro Morgannwg | 850 | 19 | 94 | 162 | 216 | 1 | **1,342** |
| Swansea Bay | 1,612 | 37 | 239 | 356 | 462 | 0 | **2,706** |
| Cwm Taf | 502 | 15 | 50 | 157 | 126 | 0 | **850** |
| Cwm Taf Morgannwg | 2,190 | 95 | 194 | 671 | 478 | 4 | **3,632** |
| Aneurin Bevan | 3,640 | 153 | 343 | 699 | 826 | 30 | **5,691** |
| Cardiff and Vale | 3,270 | 113 | 526 | 668 | 732 | 0 | **5,309** |
| **Wales** | **17,842** | **783** | **2,028** | **3,869** | **4,311** | **37** | **28,870** |
| | | | | | | | *Per cent (a)* |
| Betsi Cadwaladr | 61.9 | 3.9 | 6.1 | 11.8 | 16.3 | | **100** |
| Powys Teaching | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | | **100** |
| Hywel Dda | 59.2 | 3.7 | 6.8 | 14.4 | 15.8 | | **100** |
| Abertawe Bro Morgannwg | 63.4 | 1.4 | 7.0 | 12.1 | 16.1 | | **100** |
| Swansea Bay | 59.6 | 1.4 | 8.8 | 13.2 | 17.1 | | **100** |
| Cwm Taf | 59.1 | 1.8 | 5.9 | 18.5 | 14.8 | | **100** |
| Cwm Taf Morgannwg | 60.4 | 2.6 | 5.3 | 18.5 | 13.2 | | **100** |
| Aneurin Bevan | 64.3 | 2.7 | 6.1 | 12.3 | 14.6 | | **100** |
| Cardiff and Vale | 61.6 | 2.1 | 9.9 | 12.6 | 13.8 | | **100** |
| **Wales** | **61.9** | **2.7** | **7.0** | **13.4** | **15.0** | | **100** |

Source: Maternity Indicators dataset

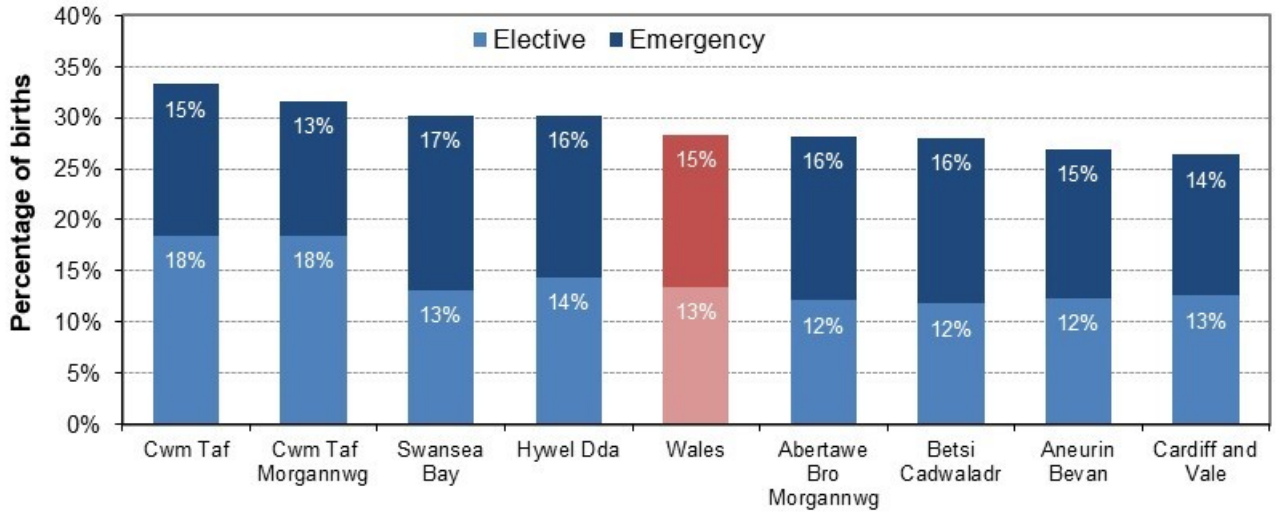
(a) The percentages are of the total records less records with a 'not stated' value. 37 records in 2019 had no stated mode of birth.

Chart 12 shows that the share of different modes of birth has not changed much over the four years for which there is data.

Table 10 shows that in 2019, the majority (62%) of births were spontaneous (unassisted) births, while 28% births were delivered by caesarean section.

There are some variations across health boards, with the spontaneous birth rate being four or five percentage points higher in Aneurin Bevan than Hywel Dda, Swansea Bay and Cwm Taf Morgannwg. All babies born in Powys were spontaneous as the health board only has hospitals with small maternity units suitable for low risk pregnancies only. Any pregnancy considered high risk would normally be delivered in a District General Hospital in a neighbouring health board.

**Chart 13: Percentage (a) of births (live and still) by caesarean section by health board, 2019**

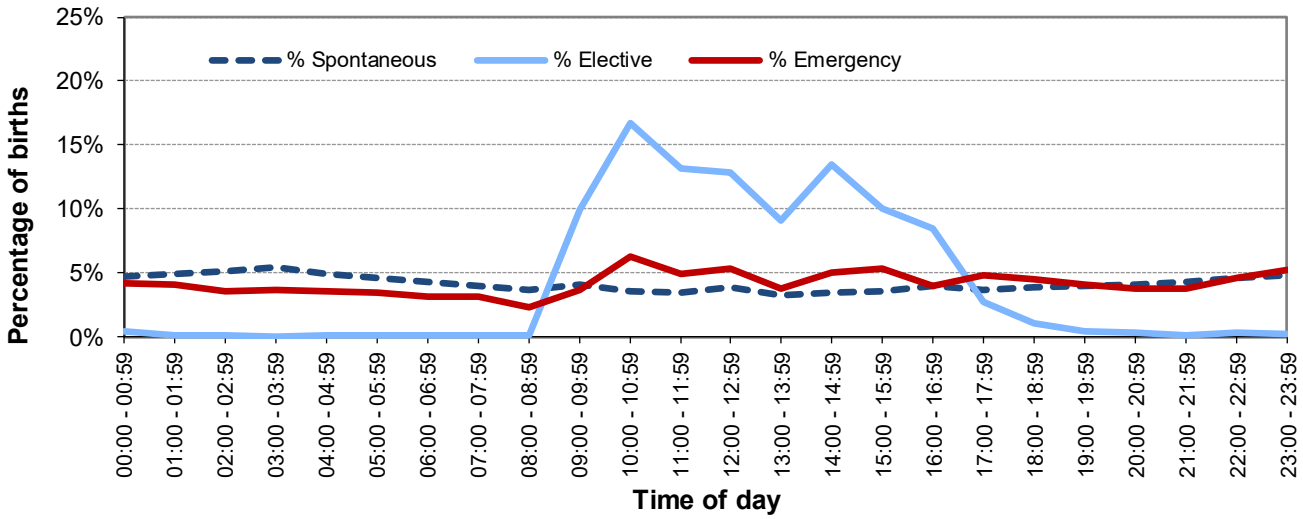



Source: Maternity Indicators dataset
(a) The percentages are of the total records less records with a 'not stated' value. In 2019, 37 records had no stated mode of birth.

Cwm Taf (Jan-Mar) and Cwm Taf Morgannwg (Apr-Dec) had the largest rate of overall caesarean sections (33% and 32% respectively), while Cardiff and Vale had the lowest overall caesarean section rate (27%). All health boards with the exception of Cwm Taf/Cwm Taf Morgannwg had slightly higher rates of emergency caesarean section than elective caesarean section.

## Time of birth

**Chart 14: Births (live and still) by time of birth and mode of birth (a), Wales, 2019**




Source: Maternity Indicators dataset
(a)The percentages are of the total records less records with a 'not stated' value. In 2019, 37 records had no stated mode of birth.

The distribution of live births by hour of the day is shown in Chart 14. Most births by spontaneous vaginal delivery occurred between 3am and 4am and fewest between 1pm and 2pm. Slightly more emergency caesareans happened between the hours of 10am and 1pm than other parts of the day. However, nearly all elective caesarean sections occurred between 9am and 5pm, with over half occurring between 9am and 1pm.

## Outcomes for baby

Data presented in this section focusses on the 28,870 births (live and still) recorded in the Maternity Indicators dataset which took place in 2019, as well as the 29,854 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.

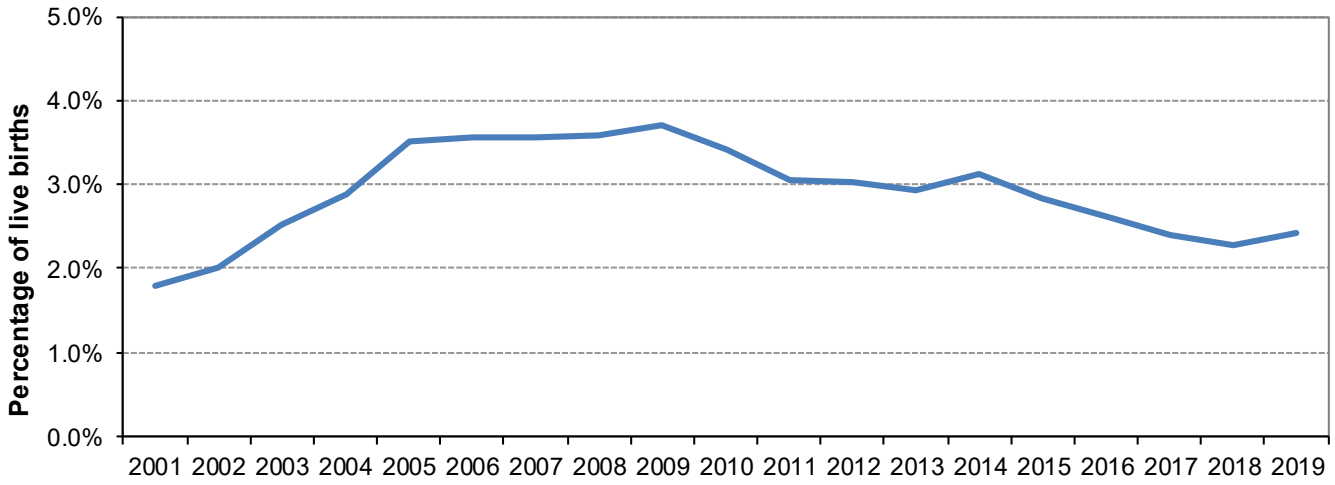
### Table 11: Live births, still births and number of babies by health board providing the service, 2019

| | Live births | | | | | |
|---|---|---|---|---|---|---|
| | Singletons | Multiples | **Total live births** | Still births | Not stated | **Total all births** |
| Betsi Cadwaladr | 5,845 | 171 | **6,016** | 36 | 2 | **6,054** |
| Powys | 211 | 0 | **211** | 0 | 0 | **211** |
| Hywel Dda | 2,999 | 60 | **3,059** | 16 | 0 | **3,075** |
| Abertawe Bro Morgannwg | 1,310 | 25 | **1,335** | 7 | 0 | **1,342** |
| Swansea Bay | 2,614 | 83 | **2,697** | 8 | 1 | **2,706** |
| Cwm Taf | 834 | 12 | **846** | 4 | 0 | **850** |
| Cwm Taf Morgannwg | 3,521 | 96 | **3,617** | 15 | 0 | **3,632** |
| Aneurin Bevan | 5,469 | 192 | **5,661** | 30 | 0 | **5,691** |
| Cardiff and Vale | 5,136 | 150 | **5,286** | 22 | 1 | **5,309** |
| **Wales** | **27,939** | **789** | **28,728** | **138** | **4** | **28,870** |

Source: Maternity Indicators dataset

Of the 28,870 births recorded on the Maternity Indicators dataset in Wales in 2019, over 99.5% of them (28,728) were live births. Of these live births, 2.7% (789) were multiple births (twins, triplets or higher order). Of those health boards where a multiple birth took place, the rate varied from 2.0% in Hywel Dda to 3.4% in Aneurin Bevan.

### Chart 15: Percentage of live births born at home, Wales, 2001 to 2019




Source: National Community Child Health Database
The percentages are of the total live births minus births with no stated place of birth: 165 (0.6% of) births had no stated place of birth in 2019.

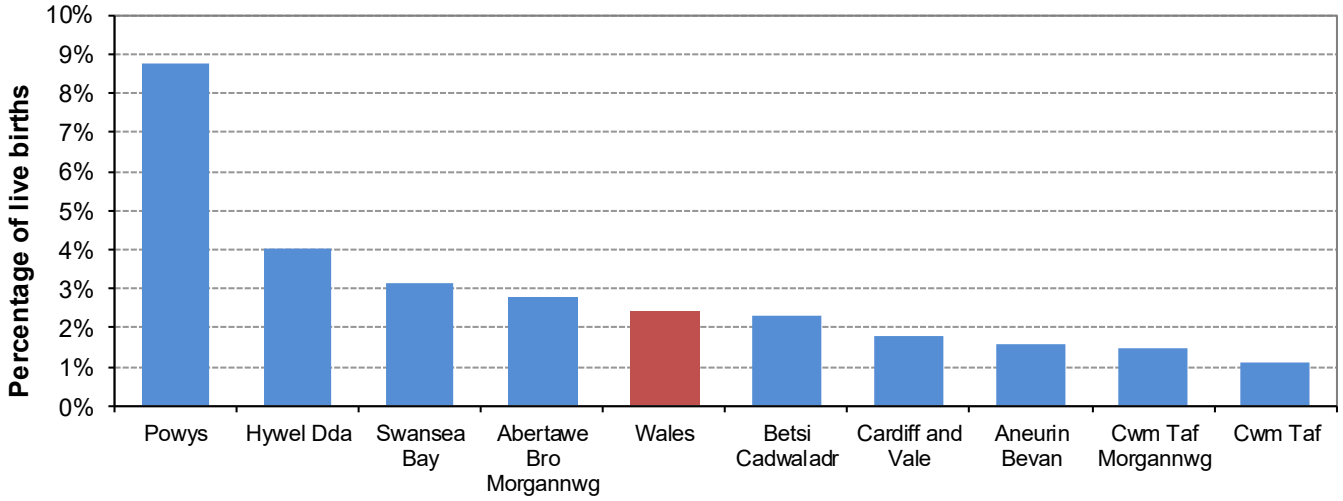
**Summary**: Health boards in Wales are expected to provide access to a range of services for women to give birth including home births. The proportion of all live births born at home has been on a downward trend over the past decade following a period of increasing homebirth rates in the 2000's.

**Latest data**: 2% (or 719) of all live births in 2019 were born at home.

**Annual change**: The percentage of all live births born at home rose by 0.1 percentage points since 2018 and the number of live births born at home rose by 7.

**10 year change**: The proportion of all live births born at home has fallen over the decade, from 3.4% in 2010 to 2.4% in 2019 and the number of births born at home decreased by 508.

### Chart 16: Percentage (a) of live births born at home by health board, 2019



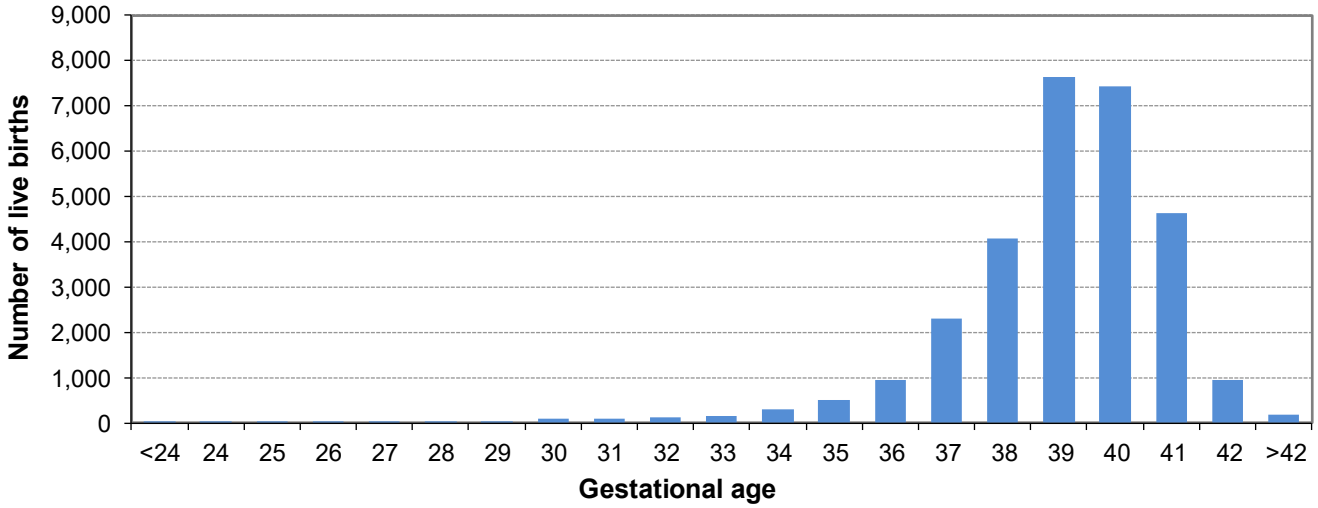

Source: National Community Child Health Database
(a) The percentages are of the total live births minus births with no stated place of birth: For 40 births, the place of birth recorded was "ambulance" and 165 births had "not stated" place of birth in 2019.

Chart 16 shows the proportion of births born at home in 2019 by mother's resident local health board. Home birth rates ranged from 1% in Cwm Taf (Jan-Mar) and Cwm Taf Morgannwg (Apr-Dec) to 9% in Powys (where there are no major hospitals). Overall in Wales 2% of births were born at home.

## Gestational age

It is known that babies born prematurely or "pre-term" (before 37 weeks of pregnancy) may have a higher risk of immediate or longer-term health problems.

### Chart 17: Distribution of live births by gestational age, 2019



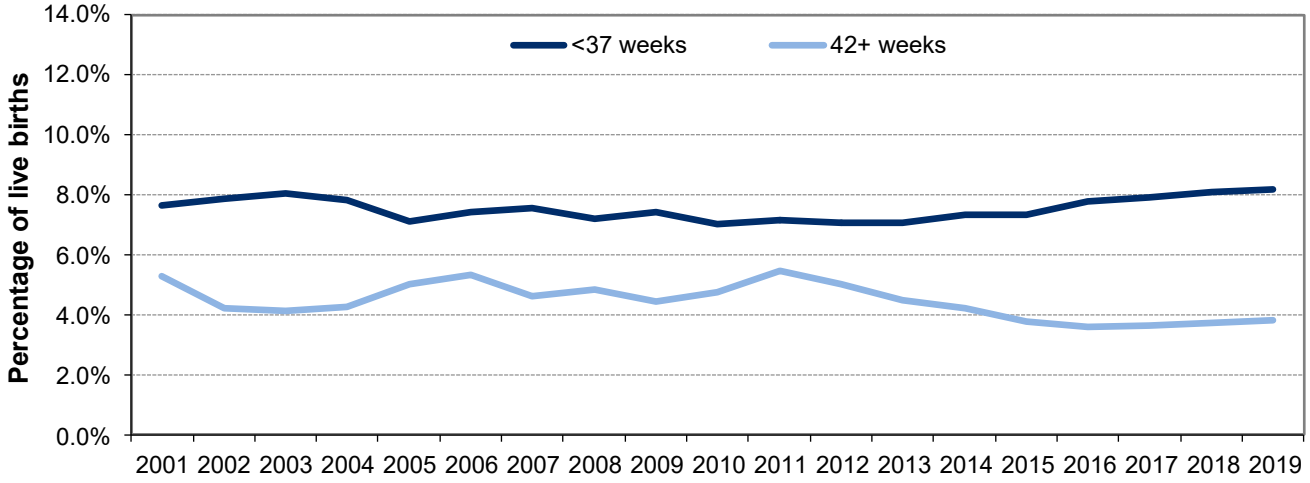

Source: National Community Child Health Database

Note: Chart based on 29,633 births, it does not include the 95 births where the gestational age was not known.

## Summary

Half (51%) of births occurred when the gestational age was 39 or 40 completed weeks (one week either side of the typical expected due date); while 8% of births occurred when the gestational age was 36 weeks or fewer and 4% of births when the gestational age was 42 weeks or more.

### Chart 18: Percentage (a) of live births by gestational age (b), 2001 to 2019




Source: National Community Child Health Database

(a) The percentages are of the total live births minus births with no stated gestational age: 95 births had no stated gestational age in 2019 (includes gestations of less than 20 weeks and more than 45 weeks).
(b) Best estimate available: based on either date of last menstrual period or from an ultrasound scan.

**Summary:** The proportion of live births born prematurely has fluctuated around 7 and 8 per cent over the course of the time series, with a gradual increase being apparent in more recent years. Conversely the proportion of live births being born at 42 weeks or more has been on a downward trend over the last decade but has stabilised over the short term.

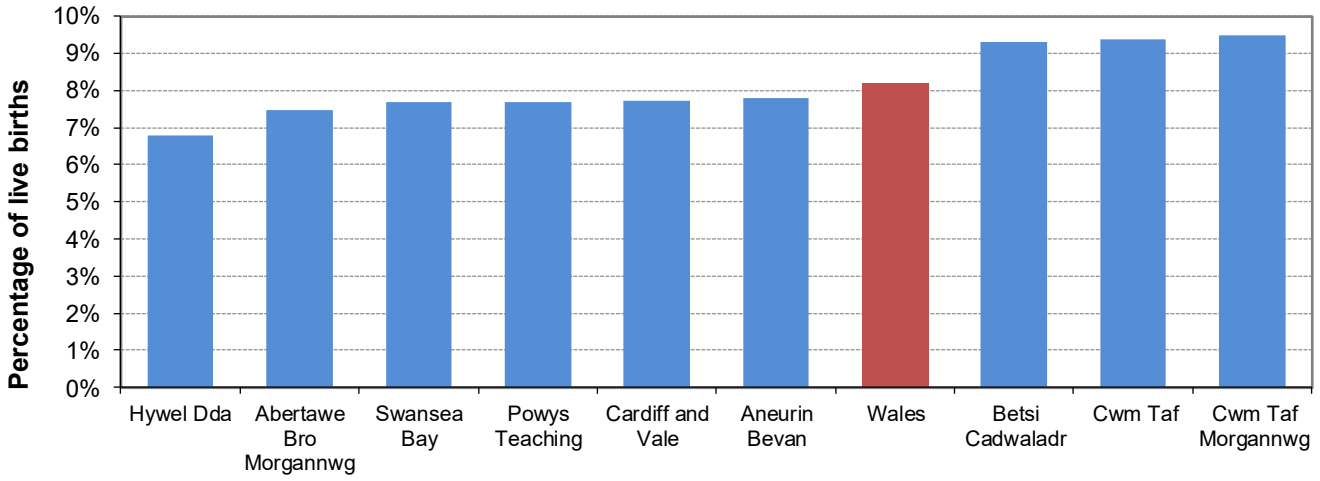
**Latest data**: 88% (or 26,070) of live births in 2019 were born at 37 to 41 weeks gestation. 8% (or 2,430) of live births were pre-term and 4% (or 1,133) of live births were born at 42 weeks or more.

**Annual change**: There was little change over the year. The percentage of live births born pre-term increased by 0.1 percentage points since 2018 but the number of live births born pre-term decreased by 94. The percentage of live births born at 42 weeks or more increased by 0.1 percentage points since 2018 but the number of live births born at 42 weeks or more fell by 34.

**10 year change**: There has been a small amount of change over the last 10 years. The percentage of live births born pre-term increased by 1 percentage point since 2010 but the number of live births born pre-term decreased by 97. The percentage of live births born at 42 weeks or more decreased by 1 percentage point since 2010 and the number of live births born at 42 weeks or more fell by 567.

**Change since first year of data:** The percentage of live births born pre-term increased slightly by 0.6 percentage points since 2001, and the number of live births born pre-term increased by 229. The percentage of live births born at 42 weeks or more fell by 2 percentage points since 2001, and the number of live births born at 42 weeks or more fell by 394.

**Chart 19: Percentage (a) of live births at less than 37 weeks gestational age by health board, 2019**




Source: National Community Child Health Database
(a) The percentages are of the total live births less births with no stated gestational age: 95 births had no stated gestational age in 2019 (includes gestations of less than 20 weeks and more than 45 weeks).

Chart 19 shows the proportion of births born at less than 37 weeks gestation by local health board.

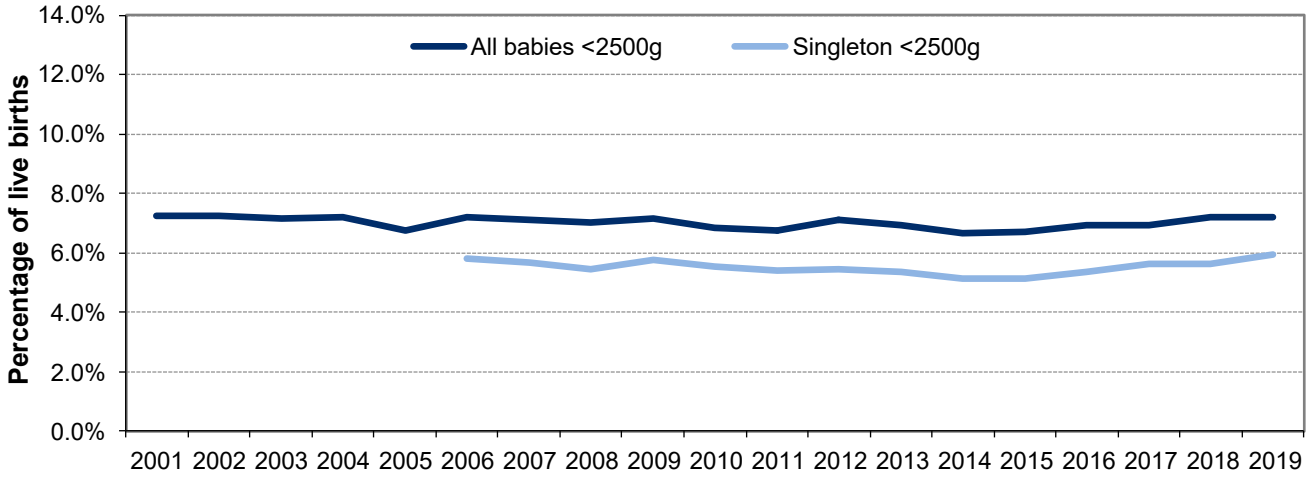
Hywel Dda had the lowest percentage with 7%, while Cwm Taf (Jan-Mar) and Cwm Taf Morgannwg (Apr-Dec) had the highest percentage with 9%.

## Birthweight

Low birthweight (less than 2.5kg) is associated with health risks in an infant's first year of life.

The percentage of live single births with a birthweight of under 2.5kg is one of 46 national indicators used to measure progress against the well-being goals under the Well-being of Future Generations Act. Data for this national indicator is available on StatsWales by local authority area and local health board. Low birthweights are often linked to low gestational age (i.e. where the baby is born before 37 weeks of gestation).

**Chart 20: Percentage (a) of live births with low birthweight, 2001 to 2019**




Source: National Community Child Health Database

(a) The percentages are of the total live births minus births with no stated birthweight: 68 (or 0.2% of) births had no stated birthweight in 2019 (includes birthweights of less than 0.5kg or more than 6kg).

**Summary**: The proportion of all live births (including both singleton and multiple births) born with low birthweight has remained fairly steady over the long term, fluctuating at around 7%.

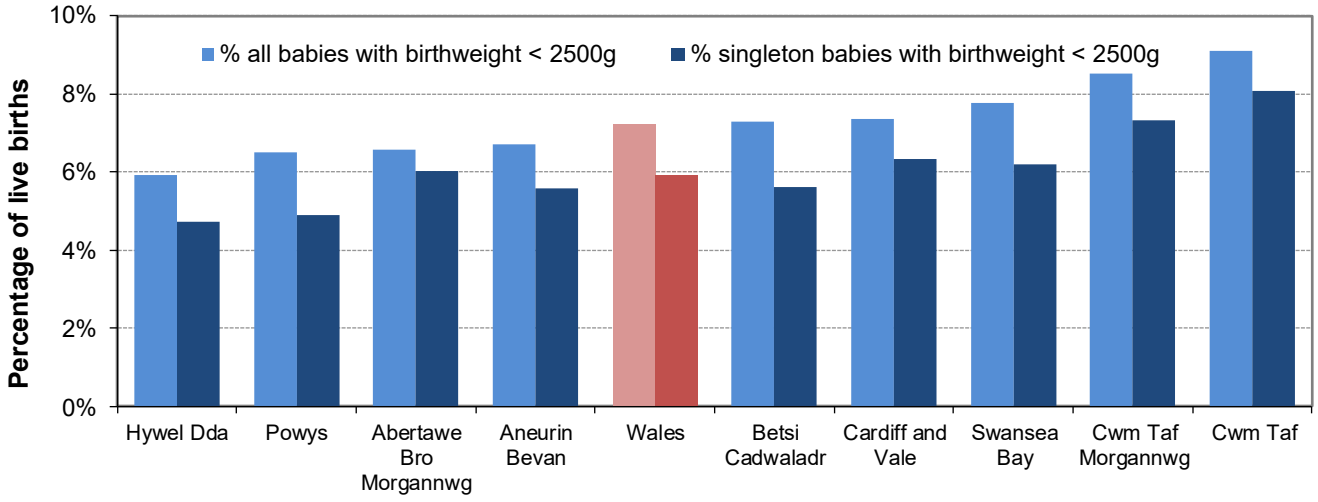
**Latest data**: 82% (or 24,205) of all live births in 2019 were born with healthy birthweights of between 2500-3999g. 7% of all live births (or 2,141) and 6% of singleton live births (or 1,720) were of low birthweight.

**Annual change**: The percentage of all live births born with low birthweight increased remained unchanged since 2018 but the number of live births born with low birthweight fell by 113. The percentage of singleton live births born with low birthweight increased by 0.3 percentage points since 2018 and the number of singleton live births born with low birthweight increased by 7.

**10 year change**: There has been little change in the distribution of births by birthweight over the last 10 years. The proportion of all low birthweight babies and singleton babies have both increased by 0.4 percentage points since 2010.

**Change since first year of data:** Since 2001 the percentage of all low birthweight babies has remained unchanged. Since 2006 (the first year there is comparable data for singleton babies) the percentage of singleton low birthweight babies has increased marginally by 0.1 percentage points.

**Chart 21: Percentage (a) of live births less than 2.5 kg birthweight by health board, 2019**




Source: National Community Child Health Database

(a) The percentages are of the total live births minus births with no stated birthweight: 61 (single) births and 68 (all live) births had no stated birthweight in 2019 (includes birthweights of less than 0.5kg or more than 6kg).

Chart 21 shows the proportion of all live births and singleton live births weighing less than 2.5kg at birth by local health board of residence in 2019. The proportions (of all live births) varied from 6% in Hywel Dda to 9% in Cwm Taf (Jan-Mar) and Cwm Taf Morgannwg (Apr-Dec).

Giving birth to twins or triplets can be associated with increased health risks. There has been little change in the distribution of births by number of babies born over the last 10 years (Table 20 in Annex). In 2019, 2.7% of all births were multiple births (twins, triplets or higher order multiple births). Table 12, Chart 22 and Chart 23 show how the spread of birthweights differ between singleton births and multiple births (twins and triplets).

## Table 12: Birthweight by number of babies and ethnicity, Wales, 2019

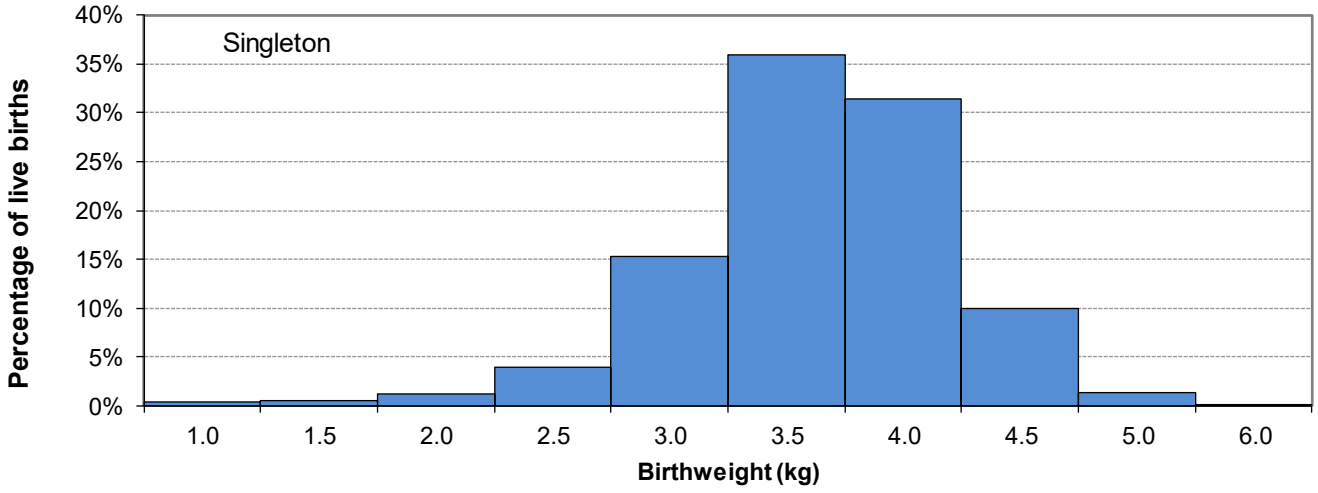
*Per cent*

| Birthweight | Singleton | Multiple | Singleton white | Singleton non-white |
|---|---|---|---|---|
| Below 2.5kg (%) | 5.9% | 58.7% | 5.9% | 6.5% |
| Between 2.5kg and 4kg (%) | 82.6% | 41.1% | 82.4% | 85.2% |
| Over 4kg (%) | 11.4% | 0.1% | 11.6% | 8.3% |
| Mean (kg) | 3.37 | 2.30 | 3.38 | 3.29 |
| Median (kg) | 3.40 | 2.38 | 3.41 | 3.31 |

Source: National Community Child Health Database

Singleton and Multiple births based on 29,660 live, Welsh births with a valid birthweight.
Ethnicity data based on 20,082 live, Welsh births with valid birthweight and ethnicity data items.

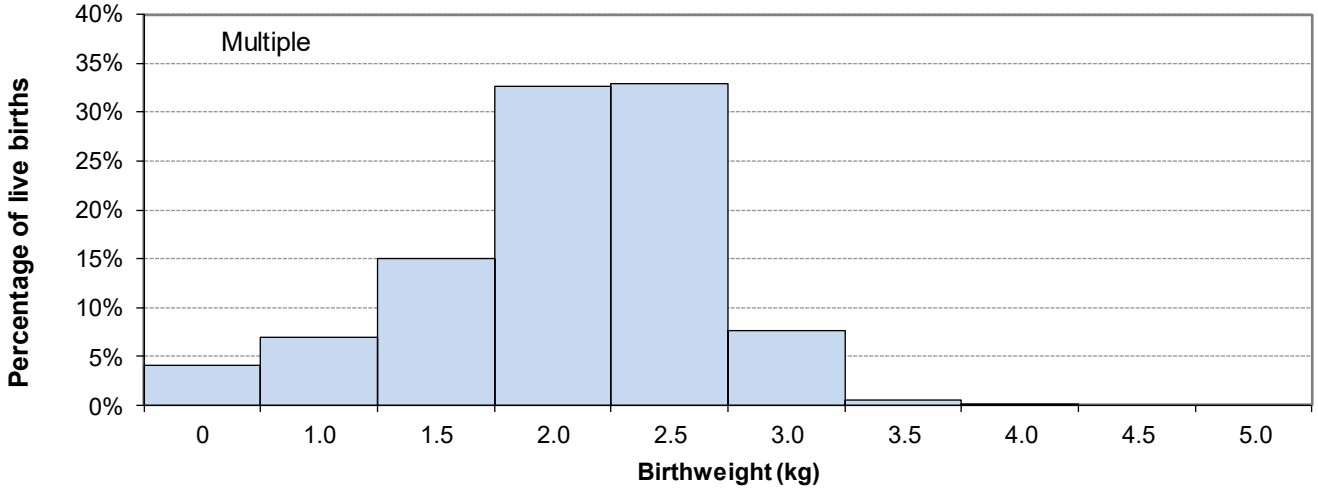
## Chart 22: Spread of singleton birthweights, Wales, 2019




Source: National Community Child Health Database

The percentages are of the total live births minus births with no stated birthweight: 61 singleton births had no stated birthweight in 2019 (includes birthweights of less than 0.5kg or more than 6kg).

## Chart 23: Spread of multiples (twins and triplets) birthweights, Wales, 2019




Source: National Community Child Health Database

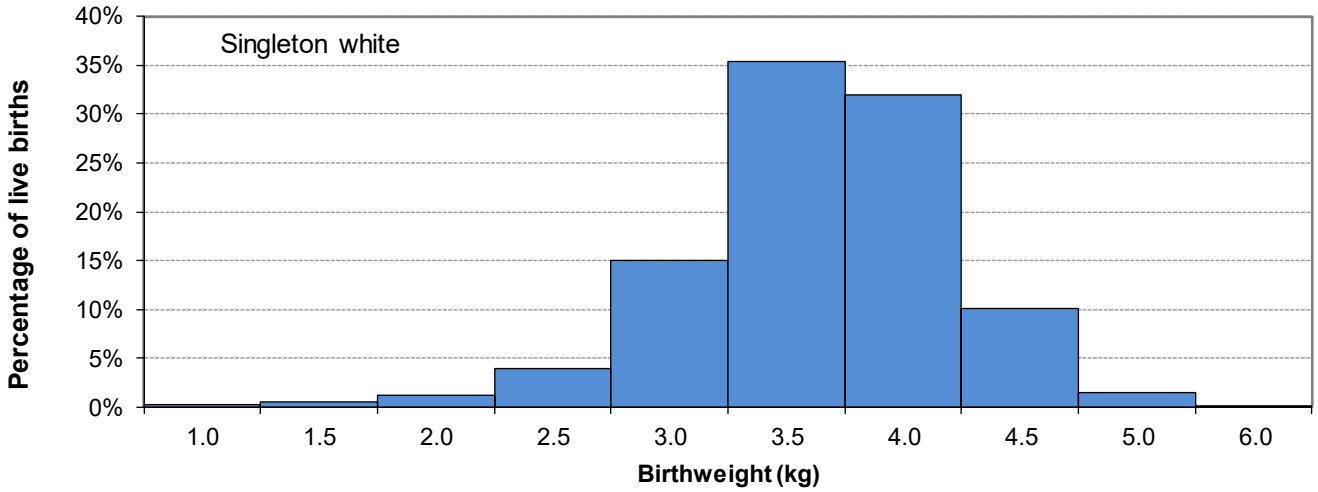
The percentages are of the total live births minus births with no stated birthweight: 7 multiple births had no stated birthweight in 2019 (includes birthweights of less than 0.5kg or more than 6kg).

The average (mean) birthweight for singleton births was 3.37 kg (7 lb and 7 oz) and 2.30 kg (5 lb and 1 oz) for multiple births. The median birthweight, which is less affected by extreme values than the mean, was 3.40 kg (7 lb and 8 oz) for singleton births and 2.38 kg (5 lb and 4 oz) for multiple births.

Over 4 out of 5 singleton babies weighed between 2.5 kg and 4 kg compared to 2 out of 5 for multiple births.

Chart 24 and Chart 25 show how the spread of birthweights differ between singleton births from white ethnic groups and singleton births from ethnic minority groups.

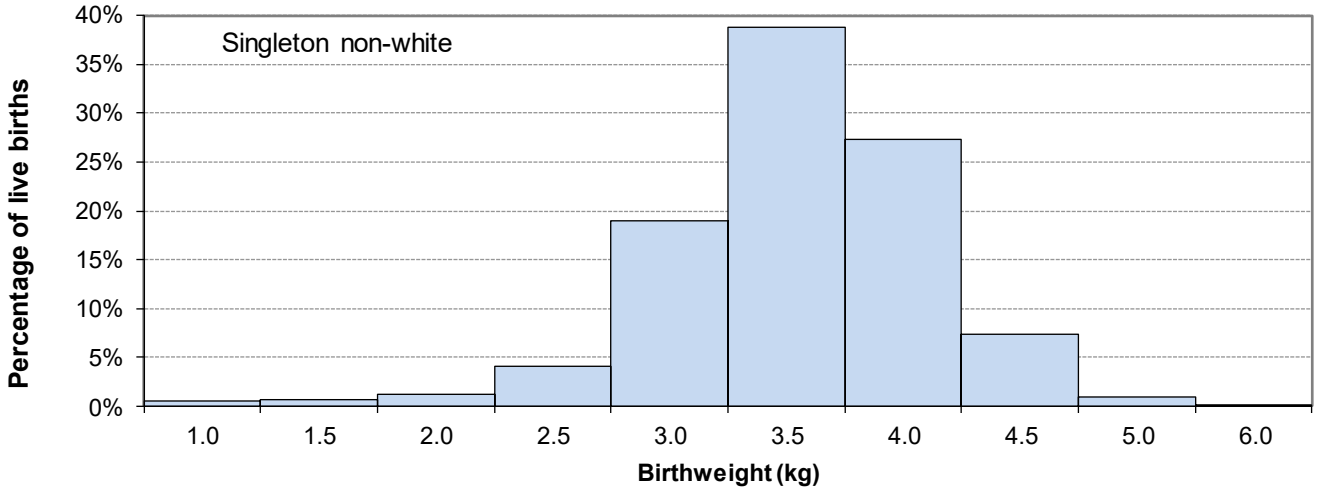
### Chart 24: Spread of singleton birthweights for babies from white ethnic groups, Wales, 2019




Source: National Community Child Health Database

The percentages are of the total live births minus births with no stated birthweight: 34 singleton white births had no stated birthweight in 2018 (includes birthweights of less than 0.5kg or more than 6kg).

### Chart 25: Spread of singleton birthweights for babies from ethnic minority groups, Wales, 2019



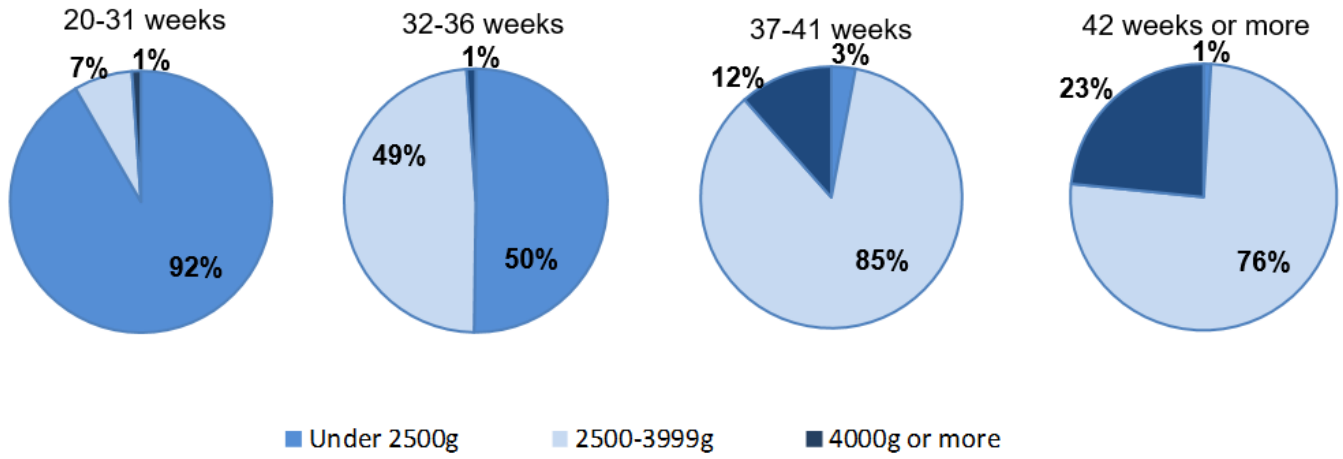

Source: National Community Child Health Database

The percentages are of the total live births minus births with no stated birthweight: 11 singleton ethnic minority births had no stated birthweight in 2019 (includes birthweights of less than 0.5kg or more than 6kg).

Of those singleton babies born with their ethnicity stated in 2019, 89% were from white ethnic groups and 11% from ethnic minority groups. More data on births by ethnic group is included at Table 21.

While the spread of birthweights is broadly similar between the two ethnicity categories, birthweights tended to be slightly higher for those from white ethnic groups. Mean birthweight was 0.09 kg higher and median birthweight was 0.10 kg higher in singleton babies from white ethnic groups than ethnic minority groups; while babies weighing 4 kg or greater was 3 percentage points higher in babies from white ethnic groups.

### Chart 26: Live births by birthweight and gestational age, 2019

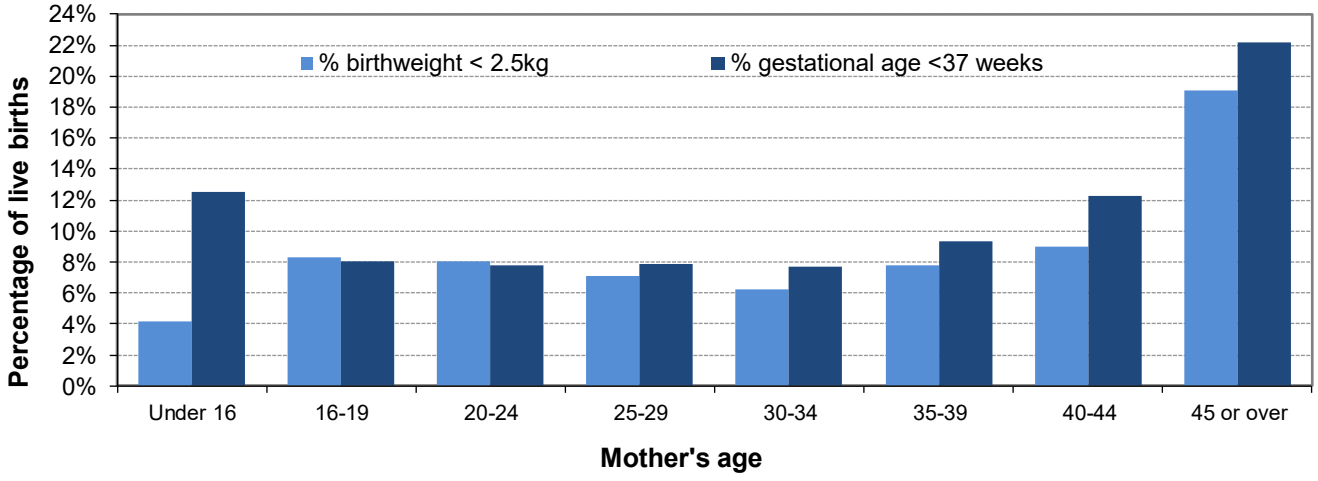



Source: National Community Child Health Database (NCCHD) 2019
68 births had no birthweight stated, 95 births had no gestation stated and are not included in the charts.

Chart 26 shows how birthweights can be affected by gestational age.

92% of births (or 330 babies) born at gestations less than 32 weeks and 50% (or 1,016 babies) born at 32-36 weeks had low birthweights (less than 2.5kg). Conversely, 1% (or 10 babies) born at gestations 42 weeks or more had low birthweights, but 23% (or 265 babies) weighed more than 4kg.

### Chart 27: Percentage (a) of live births by mother's age: low birthweight and low gestational age, 2019




Source: National Community Child Health Database (NCCHD)

(a) The percentages are of the total live births minus births with no stated birthweight: 68 births had no stated birthweight in 2019 (includes birthweights of less than 0.5kg or more than 6kg), 95 births had no stated gestational age in 2019 (includes gestations of less than 20 weeks and more than 45 weeks).

Chart 27 shows that the proportion of low birthweight (less than 2.5kg) live births is greater for mothers aged under 20, or aged 40 or over. Similarly, the proportion of babies born at less than 37 weeks gestation is greater in younger and older mothers than in the middle age groups.

Note this data can be volatile from year-to-year for mothers aged under 16 as there are so few live births to mothers of this age.

### Healthy births

Data presented is sourced from the 28,870 total births which were recorded in the Maternity Indicators dataset in 2019.

The 'percentage of births considered to be healthy births' was an original Welsh Government Maternity Indicator. Only complete records are included in the healthy births analysis i.e. each record must have valid entries to all the fields related to the criteria below to be included in the denominator.

Any of the following criteria exclude the birth from being considered as 'healthy':

- an onset of labour other than spontaneous;
- augmentation in labour;
- caesarean section, use of forceps or ventouse;
- gestational age of less than 37 weeks;
- still birth;
- epidural in labour;
- 3rd or 4th degree perineal trauma or episiotomy;
- birthweight of less than 2500g or greater than 4000g;
- blood loss of greater than 500ml; and
- APGAR score at 5 minutes less than 7.

In 2019, 29% of births in Wales were classed as 'healthy births' (using 75% of records with complete data). Completeness of the component fields was mixed and only four health boards returned reliable data (90% or more complete). In these health boards, the percentage of healthy births was highest in Powys (65%) and lowest in Betsi Cadwaladr (23%).

### Table 13: Percentage (a) of births considered to be healthy births, and completeness of healthy births denominator by health board providing the service

*Percentage of live births:*

| | 2016 | | 2017 | | 2018 | | 2019 | |
|---|---|---|---|---|---|---|---|---|
| | Healthy births denominator completeness | % Healthy births | Healthy births denominator completeness | % Healthy births | Healthy births denominator completeness | % Healthy births | Healthy births denominator completeness | % Healthy births |
| Betsi Cadwaladr | 70.5 | 11.3 | 93.2 | 13.5 | 98.3 | 15.0 | 97.6 | 22.6 |
| Powys | 79.3 | 71.8 | 75.9 | 70.6 | 89.4 | 65.1 | 89.1 | 76.6 |
| Hywel Dda | 78.9 | 33.4 | 75.9 | 31.6 | 72.2 | 30.4 | 71.8 | 32.2 |
| Abertawe Bro Morgannwg | 91.9 | 30.5 | 90.5 | 30.6 | 90.1 | 30.1 | 90.1 | 31.2 |
| Swansea Bay | .. | .. | .. | .. | .. | .. | 89.4 | 29.1 |
| Cwm Taf | 99.0 | 30.2 | 98.9 | 27.6 | 99.1 | 28.0 | 99.2 | 26.9 |
| Cwm Taf Morgannwg | .. | .. | .. | .. | .. | .. | 83.8 | 28.3 |
| Aneurin Bevan | 21.0 | 43.3 | 32.6 | 32.3 | 35.7 | 33.6 | 35.0 | 34.9 |
| Cardiff and Vale | 77.9 | 33.4 | 76.5 | 33.8 | 72.4 | 33.2 | 72.9 | 31.3 |
| **Wales** | **71.2** | **29.0** | **76.5** | **27.2** | **77.3** | **27.0** | **75.1** | **28.9** |

Source: Maternity Indicators dataset
(a) Wales data based on 22,035 records for 2016, 23,395 records for 2017, 23,411 records for 2018 and 21,682 records for 2019.

## Breastfeeding

Breastfeeding is recognised as being of crucial importance for the health of babies and their mothers.

The Maternity Indicators dataset records the mother's intention to breastfeed rather than whether breastfeeding at birth actually occurred. Since the indicator is about the mother, data presented refers to the 28,471 deliveries (mothers who delivered) in 2019.

Data on breastfeeding at birth, and on babies turning 10 days, 6 weeks and 6 months are recorded in the National Community Child Health Database and data presented here refers to the records where there was *any* breastfeeding (includes babies fed with solely breastmilk, and those combination fed).

For breastfeeding at birth, data presented here refers to the 29,728 live births in 2019. For breastfeeding at the other age points, data refers to the babies turning that age in 2019: 29,565 babies turning 10 days, 29,706 turning 6 weeks, 30,362 turning 6 months.

Note that breastfeeding at 10 days, 6 weeks and 6 months has been revised for the full back series. Previously published data counted children born in the calendar year, not turning the reference age in the calendar year.

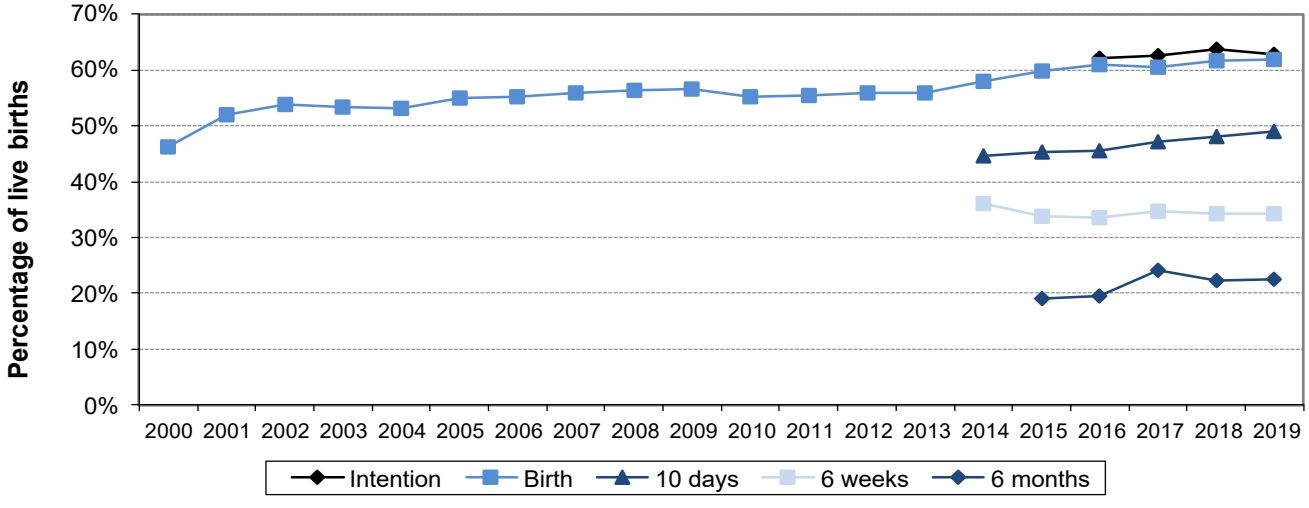
### Table 14: Intention to breastfeed and breastfeeding at birth, 10 days, 6 weeks, 6 months, by health board, 2019 (a)

| | MI ds | NCCHD, Breastfeeding at: | | | |
|---|---|---|---|---|---|
| | Intention to breastfeed | Birth | 10 days | 6 weeks | 6 months |
| Betsi Cadwaladr | 60% | 58% | 44% | 34% | 24% |
| Powys | 84% | 77% | 65% | 50% | 37% |
| Hywel Dda | 70% | 70% | 51% | 39% | 28% |
| Abertawe Bro Morgannwg | 63% | 63% | 44% | 33% | 25% |
| Swansea Bay | 66% | 67% | 48% | 39% | 27% |
| Cwm Taf | 47% | 49% | 35% | 22% | 15% |
| Cwm Taf Morgannwg | 55% | 56% | 38% | 28% | 19% |
| Aneurin Bevan | 61% | 57% | 45% | 27% | 11% |
| Cardiff and Vale | 68% | 68% | 65% | 48% | 36% |
| **Wales** | **63%** | **62%** | **49%** | **34%** | **22%** |

Source: Maternity Indicators dataset, National Community Child Health Database

(a) The percentages are of the total records less records with no stated breastfeeding status: 684 records for intention to breastfeed, 1,830 records at birth, 3,148 records at 10 days, 7,733 records at 6 weeks, 10,424 records at 6 months.

### Chart 28: Intention to breastfeed and breastfeeding at birth, 10 days, 6 weeks, 6 months, 2001-2019 (a)




Source: Maternity Indicators dataset, National Community Child Health Database

(a) The percentages are of the total records less records with a 'not stated' value, note that data completeness is low for 6 weeks and very low for 6 months.

## Summary

Breastfeeding data at all points in time is subject to data quality issues as not all records are complete. Completeness at birth has been improving in recent years. In the National Community Child Health Database over 93% of births have a valid breastfeeding status. The levels of data completeness must be considered when analysing changes over time. Note, of all the births in Wales without a known breastfeeding status at birth, almost two-thirds occurred in Aneurin Bevan and Swansea Bay health boards. In the Maternity Indicators dataset, data completeness for this item is very good across most health boards with 1% or less missing data in 6 out of the 7 health boards in 2019. Cardiff and Vale had the most missing data (9% of records) for this item.

Note that breastfeeding data after birth is collected when children have health visitor and GP appointments through the Health Child Wales Programme. If a child does not receive a contact, their breastfeeding data will be missing at that contact point.

## Latest data

Intention: At least 17,446 mothers intended to breastfeed their babies at birth in 2019. This is a rate of 63% of all mothers with a known breastfeeding status. Note data completeness in 2019 was 98%.

Birth: At least 17,261 babies were breastfed at birth in 2019. This is a rate of 62% of all births with a known breastfeeding status. Note data completeness in 2019 was 94%.

10 days: At least 12,946 babies were breastfed at 10 days in 2019. This is a rate of 49% of all births with a known breastfeeding status. Note data completeness in 2019 was 89%.

6 weeks: At least 7,546 babies were breastfed at 6 weeks in 2019. This is a rate of 34% of all births with a known breastfeeding status. Note data completeness in 2019 was 74%.

6 months: At least 4,486 children were breastfed at 6 months in 2019. This is a rate of 22% of all births with a known breastfeeding status. Note data completeness in 2019 was 66% so breastfeeding statistics at 6 months are of low reliability.

## Annual change

Intention: 1,037 fewer mothers said they intended to breastfeed their babies at birth in 2019 compared to 2018. This is a decrease of 1 percentage point comparing all mothers with a known breastfeeding status. Note data completeness in 2018 was 97%.

Birth: 1,172 fewer babies were breastfed at birth in 2019 compared to 2018. This is a small increase of 0.2 percentage points comparing all births with a known breastfeeding status. Note data completeness in 2018 was 96% and a larger number of children were born in 2018 than 2019.

10 days: 978 fewer babies were breastfed at 10 days in 2019 to 2018. This is an increase of 1 percentage point comparing all births with a known breastfeeding status. Note data completeness in 2018 was 93% and a larger number of children turned 10 days in 2018 than in 2019.

6 weeks: 1,218 fewer babies were breastfed at 6 weeks in 2019 compared to 2018. This is a very slight decrease to the percentage of babies breastfed at 6 weeks comparing all births with a known breastfeeding status. Note data completeness in 2018 was 82% a larger number of children turned 6 weeks in 2018 than in 2019.

6 months: 737 fewer babies were breastfed at 6 months in 2019 compared to 2018. This is a small increase of 0.3 percentage points comparing all births with a known breastfeeding status. Note data completeness in 2018 was 74% so breastfeeding statistics at 6 months are of low reliability and a larger number of children turned 6 months in 2018 than in 2019.

### 5 year change

Intention: 725 fewer mothers said they intended to breastfeed their babies at birth in 2019 compared with 2016 (only 4 years of data available). This is an increase of 0.7 percentage points comparing births with a known breastfeeding status. Note that data completeness in 2016 was 96%.

Birth: 1,015 more babies were breastfed at birth in 2019 compared with 2015. This is an increase of 2 percentage points comparing births with a known breastfeeding status. Note that data completeness in 2015 was 82%.

10 days: 1,587 fewer babies were breastfed at 10 days in 2019 compared with 2015. This is an increase of 4 percentage points comparing births with a known breastfeeding status. Note that data completeness in 2015 was 96% and a larger number of children turned 10 days in 2015 than 2019.

6 weeks: 2,705 fewer babies were breastfed at 6 weeks in 2019 compared with 2015. This is an increase of 1 percentage point comparing births with a known breastfeeding status. Note that data completeness in 2015 was 91% and a larger number of children turned 6 weeks in 2015 than 2019.

6 months: 131 fewer babies were breastfed at birth in 2019 compared with 2015. This is an increase of 4 percentage points comparing births with a known breastfeeding status. Note that data completeness in 2015 was 73% so breastfeeding statistics at 6 months are of low reliability and a larger number of children turned 6 months in 2015 than 2019.

### Change since first year of data

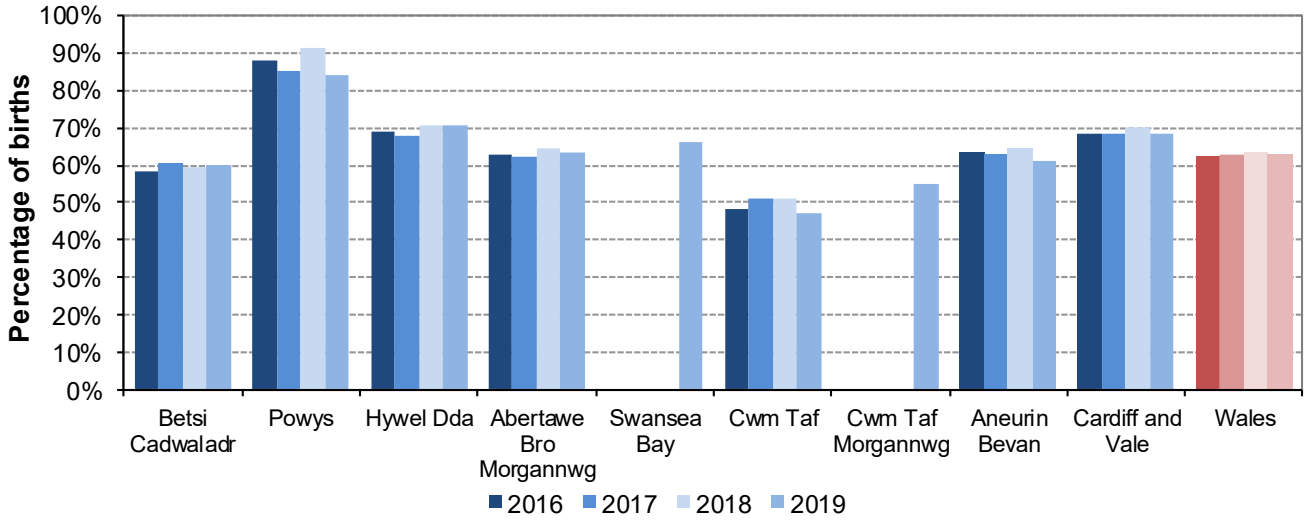
The current method of collecting breastfeeding data at birth and onwards began towards the end of 2012, and was introduced at different stages in different health boards. As data was collected on a broadly similar basis, high level data can be compared before and after this point, to give an indication of changes over time.

Birth: 12,301 more babies were breastfed at birth in 2019 compared with 2000. This is an increase of 16 percentage points comparing births with a known breastfeeding status. Note that data completeness in 2000 was very low (34%).

Data is only available for the last five years or less for intention and at 10 days, 6 weeks and 6 months.

## Intention to breastfeed

### Chart 29: Intention to breastfeed by health board providing the service (a), 2019



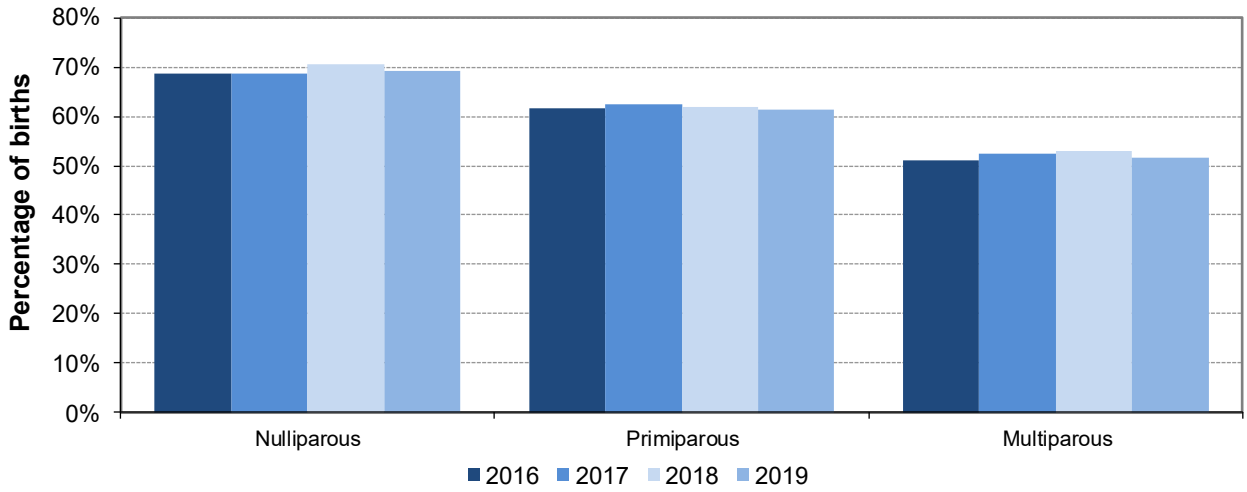

Source: Maternity Indicators dataset

(a) The percentages are of the total deliveries less births with no stated intention to breastfeed status: 1,222 births in 2016, 792 births in 2017, 774 births in 2018 and 684 births in 2019 had no stated intention to breastfeed status.

**Latest data:** Across all health boards in 2019, 63% of mothers were recorded as intending to breastfeed. This varied between health boards, with the percentage ranging from 47% of mothers in Cwm Taf (Jan-Mar) and 55% of mothers delivering in Cwm Taf Morgannwg (Apr-Dec) to 84% of mothers delivering in Powys.

**Annual change:** Only one health board, Betsi Cadwaladr, recorded an increase over the year (1 percentage point). Powys showed the largest decrease (7 percentage points), though note that there are fewer deliveries in Powys compared to the other health boards, so there is likely to be more year-to-year variation in their data.

### Chart 30: Intention to breastfeed by parity (a)(b), Wales, 2019




Source: Maternity Indicators dataset

(a) The percentages are of the total deliveries less births with no stated intention to breastfeed status: 1,222 births in 2016, 792 births in 2017, 774 births in 2018 and 684 births in 2019 had no stated intention to breastfeed status.

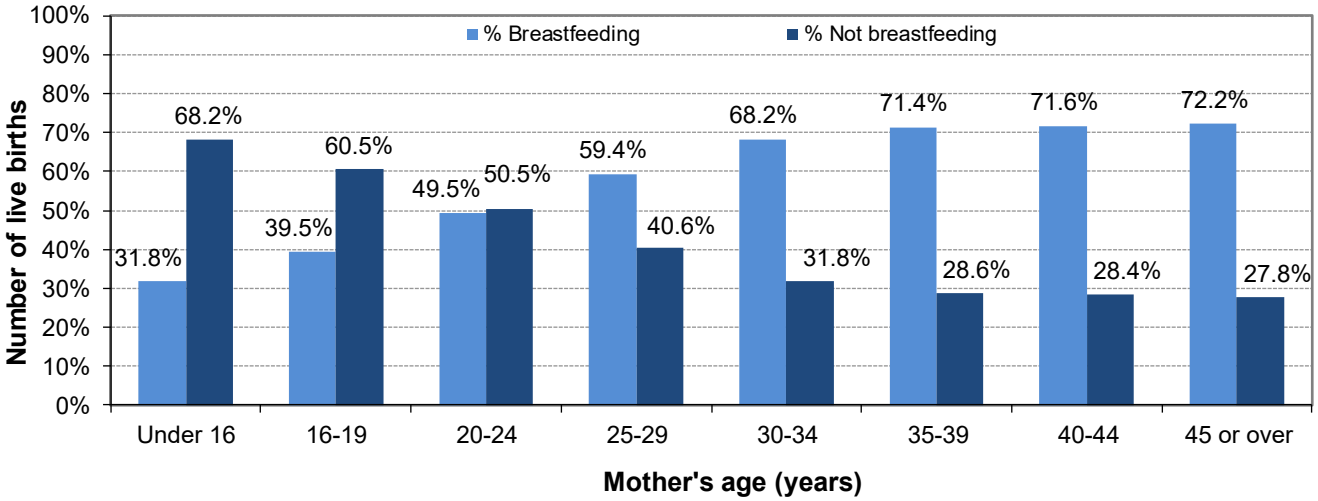
(b) Nulliparous – the mother has never previously given birth
Primiparous – the mother has previously given birth once only
Multiparous – the mother has previously given birth more than once

Chart 30 shows that first time mothers have a greater intention to breastfeed their babies than mothers who have given birth more than once. In 2019, 69% of first time mothers (nulliparous) intended to breastfeed, 61% of mothers who had given birth once previously (primiparous) intended to breastfeed, and 52% of mothers who had given birth more than once (multiparous) intended to breastfeed. There is little change over the last four years for any category.

## Breastfeeding at birth

Data for these charts are available in Table 18 and on StatsWales.

### Chart 31: Breastfeeding at birth by mother's age, 2019

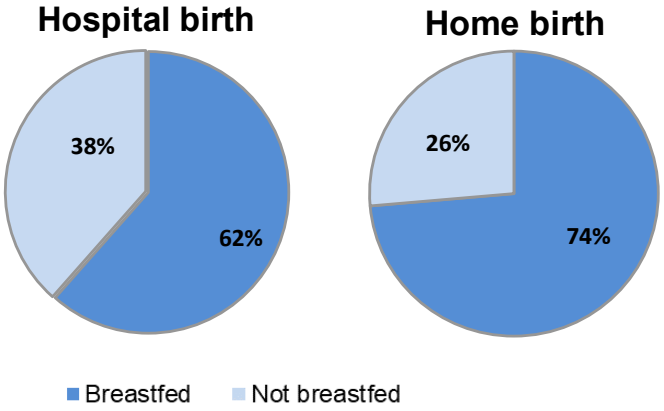



Source: National Community Child Health Database
The percentages are of the total live births minus births with no stated breastfeeding status: 6.2% (1,830 records) had no stated breastfeeding status at birth in 2019.

Chart 31 shows the percentage of babies who were breastfed at birth by age of mother.

Babies of older mothers were more likely to be breastfed than those with younger mothers. The highest rates of breastfeeding at birth were in the '45 or over' age group where 72% of babies with a known breastfeeding status were breastfed, while the highest rate of not breast fed at birth was in the under 16 age group where 68% of babies with a known breastfeeding status were not breastfed.

### Chart 32: Percentage of live births by breastfeeding status at birth and place of birth, 2019



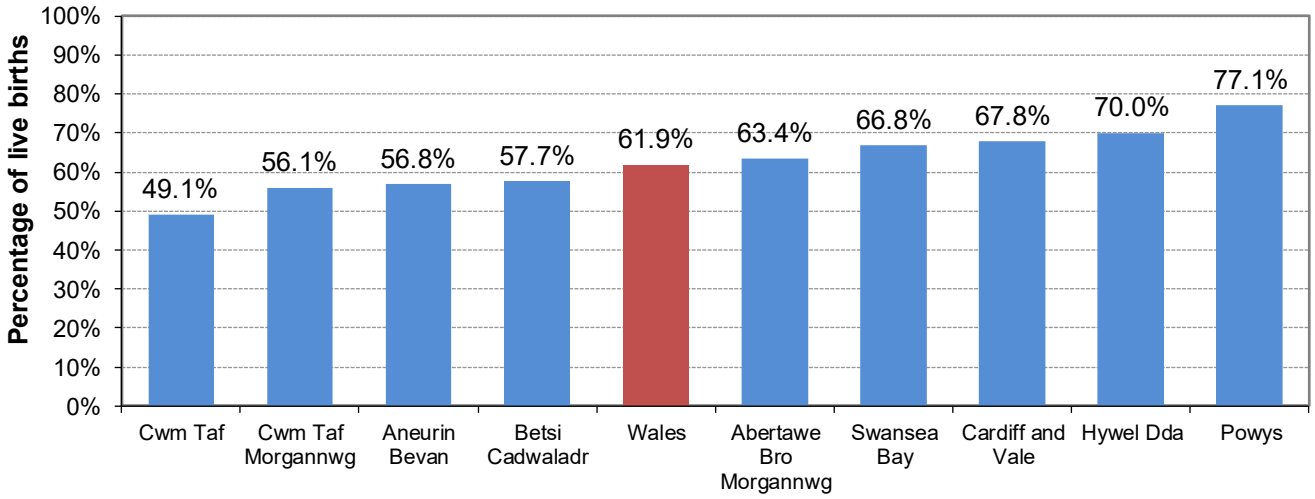

Source: National Community Child Health Database

The percentages are of the total live births minus births with no stated breastfeeding status: 5.9% (1,708) had no stated breastfeeding status for hospital births; 8.3% (60) had no stated breastfeeding status at birth for home births in 2019.

Chart 32 shows the percentage of babies breastfed at birth, by place of birth. Of those with a place of birth recorded, babies born at home were more likely to be breastfed than those born in hospitals.

In 2019, 719 babies were born at home, 40 babies' place of birth was recorded as 'ambulance' while 165 had no stated place of birth (Table 2).

**Chart 33: Percentage of live births that were breastfed at birth by health board, 2019**




Source: National Community Child Health Database

The percentages are of the total live births minus births with no stated breastfeeding status: 6.2% (1,830 records) had no stated breastfeeding status at birth in 2018.

There is considerable variation in breastfeeding rates between health boards in Wales. The highest breastfeeding rates were for babies of women resident in Powys (77%) and lowest for those in Cwm Taf (49%, Jan-Mar) and Cwm Taf Morgannwg (56%, Apr-Dec).

### Breastfeeding at 10 days and 6 weeks

Current guidelines advise that babies should be exclusively breastfed until 6 months of age.

Data for breastfeeding at 10 days and 6 weeks is collected as part of the Healthy Child Wales Programme and is recorded on health board's Child Health Systems. Data completeness is varied from year-to-year and between health board areas, but analyses are presented to give a broad indication of trends.

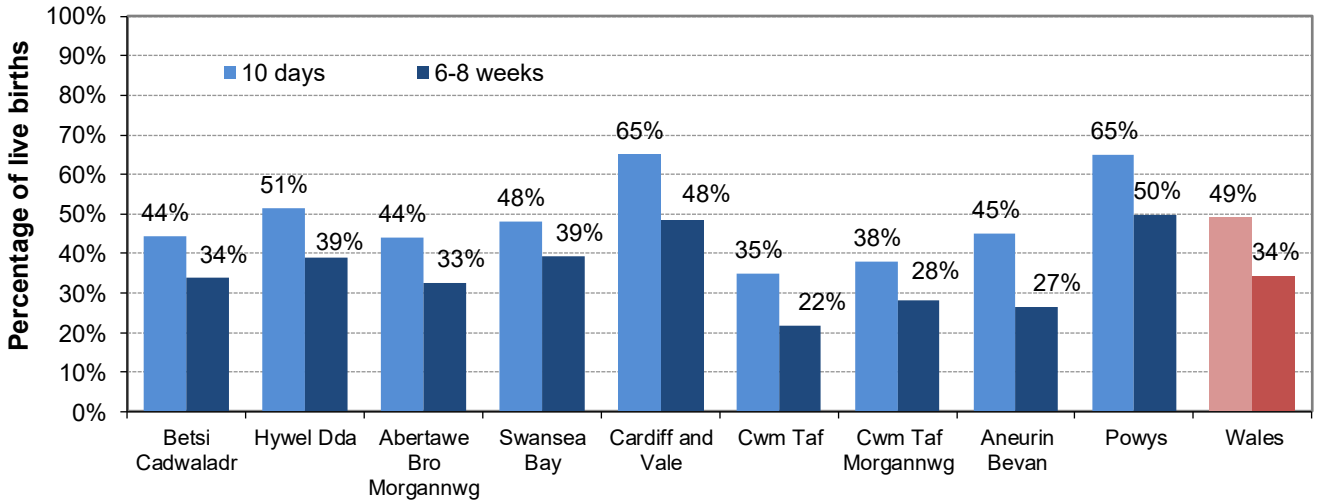
Note as data completeness is only 66% for breastfeeding at 6 months, no analyses below the high level time series summary are presented.

Data recorded on Child Health Systems data includes the following categories of infant feeding:

- artificial milk feeding;
- combined milk feeding - partially breast;
- combined milk feeding - predominantly breast; and
- exclusive milk.

Data is published at health board level both annually and quarterly for these breakdowns on StatsWales.

**Chart 34: Percentage of babies receiving any breast milk at 10 days and 6-8 weeks by health board, 2019**




Source: National Community Child Health Database
The percentages are of the total live births minus births with no stated breastfeeding status: 10.6% had no stated breastfeeding status at 10 days and 26% had no stated breastfeeding at 6-8 weeks in 2019.

Chart 34 shows the percentages of babies who were recorded as receiving *any* breast milk at 10 days and 6-8 weeks. This is includes combined milk feeding which includes breast milk plus artificial milk, and those who receive exclusively breast milk (and nothing else except water).

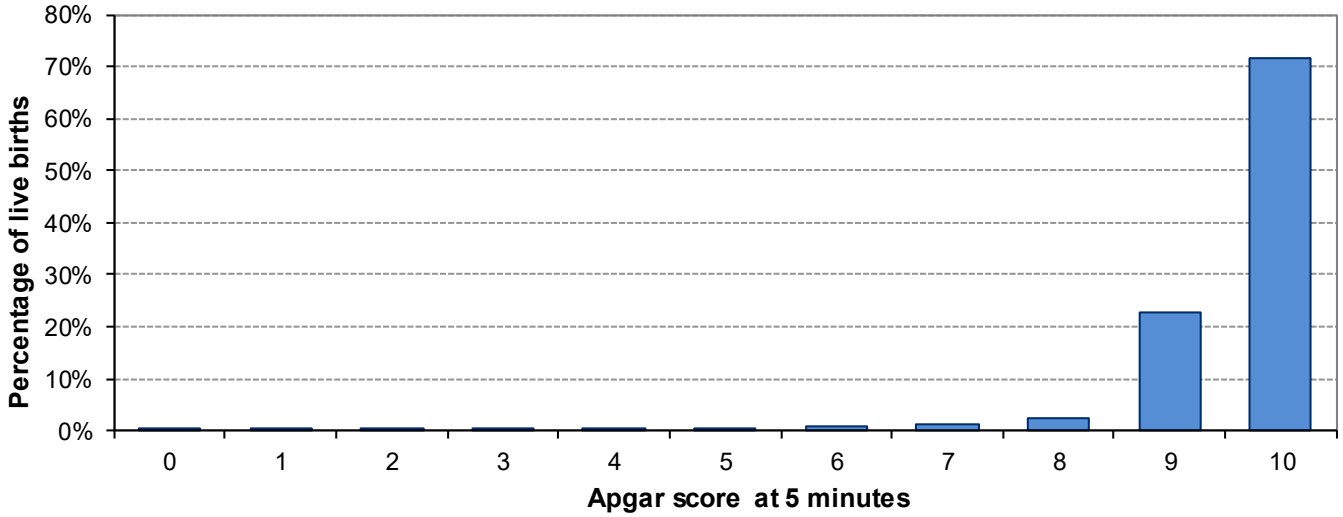
At health board level, the pattern is similar to breastfeeding at birth: Cardiff and Vale and Powys have the highest rates, while Cwm Taf Morgannwg and Aneurin Bevan have the lowest.

Additional breastfeeding data for babies born in Neonatal Units (born at less than 33 weeks gestation) is published in the National Neonatal Audit Programme (NNAP) 2019 Annual Report.

## 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.

**Chart 35: Percentage of live births by APGAR score at 5 minutes, 2019**




Source: National Community Child Health Database
The percentages are of the total live births minus births with no stated APGAR score: For 1,470 births (5% of all live births), the Apgar score at 5 minutes was recorded as "not stated" in 2019.

Chart 35 shows that for the majority of births (98%), babies had high APGAR scores (7 or over) recorded at 5 minutes.

# Key Quality Information

## Accuracy and reliability

### Sources

There are two main sources of data for this statistical release.

The Maternity Indicators dataset (MI ds) which was established by Data Standards Change Notice (DSCN) 2016/02 and official letter WHC/2016/020 on 28th June 2016.

The National Community Child Health Database (NCCHD) which draws data from the Operational Child Health System (CCH2000) databases held by local health boards (LHBs).

Please see the Maternity and Births in Wales: Quality Report for further quality information, including a description of the main strengths and limitations of the data sources.

The Maternity Indicators dataset is recently established and data quality is mixed. Welsh Government and NWIS are working with health boards to improve completeness and quality. In comparison with other sources of births and maternity data, overall counts and key statistics align reasonably well, given the limitations created by the complex merging process.

There are however specific issues with a few of the data items where the data provided does not wholly align with the Data Dictionary specification and where some health boards have difficulties providing the required data. Only a selection of the available data items has been included in this statistical release but as the data quality improves we hope to expand its scope and depth.

Annex 1 and Annex 2 show how complete individual data items are across both sources.

Data from the Maternity Indicators dataset only includes data on mothers and babies where the initial assessment and birth occurred in the same health board; or where a birth and initial assessment record could not be matched, only the birth record is retained.

Data from the National Community Child Health Database includes data on children born to Welsh residents and on children born in Welsh hospitals to non-Welsh residents. Statistics in this release are generally filtered on those children born in Wales to Welsh residents.

### Accessibility

The statistics are published in an accessible, orderly, pre-announced manner on the Welsh Government website at 9:30am on the day of publication. An RSS feed alerts registered users to this publication. Simultaneously the releases are also published on the National Statistics Publication Hub.

Statistical releases are publicised on Twitter and all releases are available to download for free.

Alt text is provided for all charts and tables so that they can be read with a screen-reader.

Data from NCCHD is published on StatsWales and data from MI ds will be added in due course. This allows users to download and link data in an open data format. It is intended that data for 2019 will be added in summer 2020.

This statistical release is the second combined maternity and births release which replaced individual stats releases on both topics. This was done to improve on data clarity to users, providing clearer

messages about the strengths and limitations of data sources and puts all statistics on maternity and births in one place.

Plain English is used in our outputs as much as possible and all outputs adhere to the Welsh Government's accessibility policy.

All our webpage headlines are published in Welsh and English.

### Timeliness and punctuality

Data is published as soon as is practicable.

The data provider (NWIS) extracted both datasets in Jan/Feb 2020, for the reference year 2019. This allows some tolerance for health board's late recording of maternity and birth information. Health boards are informed when data will be extracted and they endeavour to keep information accurate at this point in time.

Data for calendar year 2019 is currently published in May 2020; this allows the necessary time to perform validation checks on both datasets before publishing.

Publication dates are announced well in advance and any delays are communicated via notices on our website. Any revisions or postponements to outputs follow the Revisions, Errors and Postponements policies published online.

Since this report was published on 28 May 2020, birth registrations data for 2019 from ONS has been published. As a result, Table 1 has been updated so that users can easily compare totals between birth registrations and the National Community Child Heath Database and the Maternity Indicators dataset.

### Coherence and comparability

Data from the Maternity Indicators dataset for each calendar year refers to when the baby was born for both birth and initial assessment statistics. Initial assessments may have taken place in the previous year, but would be counted in the year in which the birth occurred.

Data for breastfeeding at 10 days, 6 weeks and 6 months counts children turning that age during the reference period. This means data from a different subset of children is used at each age point. This is the first time data has been published on this basis, and the whole back series has been revised.

Information is provided on why the number of births between sources is different. Comparisons of births between different parts of the UK should be made using ONS data which is collected on a comparable basis.

Maternity and birth statistics for other UK countries are available:

Scotland: Birth statistics

Northern Ireland: Birth statistics

England: NHS maternity statistics

### Relevance

The statistics provide an overview of maternity services and birth characteristics in Wales. The statistics support the new Welsh Government maternity vision: Maternity Care in Wales, A Five Year Vision for the

Future (2019-2024) and the previous Maternity Indicators, which preceded the new vision is available in this document at Annex 1.

Statistics also support analysis of key public health topics like breastfeeding and smoking and obesity in pregnancy.

Background information about statistics and sources is published for users of the statistics. All users are encouraged to contact us to let us know how they use the data and they have any other requirements.

We consult with key users prior to making changes, and where possible publicise changes on the internet, at committees and other networks to consult with users more widely. We aim to respond quickly to policy changes to ensure our statistics remain relevant.

### What are the potential uses of these statistics?

These statistics will be used in a variety of ways. Some examples of these are:

- advice to ministers
- to inform debate in the Welsh Parliament and beyond
- to make publicly available data on child health statistics in Wales
- monitoring service delivery
- policy development
- providing advice on birth choices

### Who are the key potential users of this data?

The main users are:

- ministers, policy officials and the Members Research Service in the Welsh Parliament
- local health boards
- the research community
- students, academics and universities
- breastfeeding networks
- those concerned with child health, individual citizens and private hospitals
- NHS organisations
- voluntary birth organisations

### Revisions

In this publication, data from the Maternity Indicators dataset has been revised for the full back series (2016-2019) as the merging methodology for initial assessments and birth records has changed. This should only result in minor changes to statistics published in previous publications.

In this publication, breastfeeding data from the National Community Child Health Database has been revised back to 2015, for data relating to breastfeeding at 10 days, 6 weeks and 6 months of age. Data for breastfeeding at these ages is now based on all children turning the reference age in the calendar year, rather than referring to children born in the calendar year. This change increases the number of children who could be counted at each reference age and should provide a better quality estimate.

Both the Maternity Indicators dataset and the National Community Child Health Database are live databases and are refreshed quarterly. If data extracts are taken at future points in time for previous time periods, it is possible that counts will differ from published figures if a health board has resubmitted information. Historical data is not routinely revised unless errors are discovered.

## Data access, confidentiality and disclosure control

Both the Maternity Indicators dataset and the National Community Child Health Database contain information about individual mothers and children in Wales and it is paramount that their confidentiality be protected. Therefore all data is pseudonymised by NWIS before being shared with Welsh Government, so that there are no personal identifiable data.

Users may request data from the Information Services Department in NHS Wales Informatics Service (NWIS). In order to ensure the correct data is supplied users will be asked to refine the request and describe the use they intend to make of the data. They also may be asked to collapse groups if the team fear that the resulting table may be disclosive e.g. aggregated age groups rather than single years of age. Any requests for data (including individual record level data) that the team feels may be potentially disclosive will be referred to the database Caldicott Guardian and, if necessary, to the Welsh Information Governance Board (WIGB). An extract of micro-data (individual record level data) will only be available in a limited way and only when sufficient reassurance has been received that access, confidentiality and disclosure issues have been fully addressed by the potential user, including the completion a Data Access Agreement.

Our statistics take into account our disclosure control guidance and follow ONS confidentiality guidelines for Health statistics available from: ONS best-practice guidelines.

## Maternity Indicators dataset merging methodology

NHS Wales Informatics Service (NWIS) provide both maternity and births data to Welsh Government. While data from the National Community Child Health Database is a relatively straight forward data extract, data for the Maternity Indicators dataset involves a far more complex process largely because there can be multiple initial assessment data and records for both initial assessments and births are not always complete. In merging initial assessment data with birth record data, NWIS take the following steps:

- initial assessment and birth records where the mother's NHS number is missing are removed
- birth records where the baby has no NHS number are removed
- data from the initial assessment is merged to all remaining the birth records using the mother's NHS number, which should be a unique identifier on both records
- records where the health board providing the initial assessment and where the birth occurred are the same are retained, and all non-matched birth records are also retained; all other records are removed
- records where the number of days between the initial assessment and date of birth between -1 and 315 are retained
- where there are still multiple initial assessment records for a birth, checks are performed to establish the most complete merged record; that record is then retained and any remaining duplicates are removed

## National Statistics status

The United Kingdom Statistics Authority designates National Statistics status, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Statistics.

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

Data from the National Community Child Health Database are Official Statistics, but have not been assessed for National Statistics status.

## Experimental statistics

This statistical release makes available data from the recently established Maternity Indicators dataset; data and analysis presented from this source are badged as experimental statistics. This is to inform users that the dataset is still in a developmental phase and the resultant statistics may have issues pertaining to data quality. However both the analysis and data are still of value provided that users view them in the context of the data quality information provided.

## Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being 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 Well-being goals, and (b) lay a copy of the national indicators before the Welsh Parliament. The 46 national indicators were laid in March 2016 and this release includes data relating to one of the national indicators namely

- Percentage of live single births with a birthweight of under 2,500g.

Low birthweight is associated with health risks in an infant's first year of life. The indicator will be based on singleton births and will be calculated as the percentage of births that are less than 2,500 grams.

Numerator: Singleton live births with a birthweight less than 2500g.
Denominator: All singleton live births.

The usual source for this indicator is the National Community Child Health Database (NCCHD) and the indicator relates to births to Welsh residents rather than births occurring in Welsh maternity units.

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the Well-being of Wales report.

As a national indicator under the Act they must be referred to in the analyses of local well-being produced by public services boards when they are analysing the state of economic, social, environmental and cultural well-being in their areas.

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 well-being assessments and local well-being plans.

## Further details

This report is available at: https://gov.wales/maternity-and-birth-statistics

## Next update

April 2021 (provisional)

## We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to stats.healthinfo@gov.wales

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# Annex 1: Data completeness Maternity Indicators Dataset 2016-2019

| | | % Completeness | | | |
|---|---|---|---|---|---|
| **Data Item Name** | **Data ItemTerm** | **2016** | **2017** | **2018** | **2019** |
| Provider Code IA | Local Health Board code for the site where the initial assessment occurs | 100% | 100% | 100% | 100% |
| Treatment Site Code IA | Hospital providing the service at initial assessment | 100% | 100% | 100% | 100% |
| Gestation IA | Best estimate of gestation (in completed weeks) at time of initial assessment, normally based on post menstrual age but may be modified on the basis of ultrasound scan | 95% | 98% | 98% | 97% |
| Age of Mother IA | Mother's age at time of initial assessment | 100% | 100% | 100% | 100% |
| Ethnicity | Ethnicity group as defined by mother | 56% | 73% | 78% | 68% |
| Mental Health Condition IA | The woman reports that she has a mental health condition at initial assessment | 88% | 95% | 96% | 97% |
| Height of Mother IA | Mother's height (in cm) at initial assessment | 94% | 96% | 97% | 95% |
| Weight of Mother IA | Mother's weight (in kg, to the nearest 100g) at initial assessment | 96% | 97% | 98% | 98% |
| BMI IA | Body Mass Index of mother at initial assessment | 93% | 95% | 96% | 95% |
| Smoking IA | Mother's smoking status at the time of initial assessment | 97% | 96% | 97% | 98% |
| Provider Code Birth | Local health board code for the site where the birth occurs | 100% | 100% | 100% | 100% |
| Treatment Site Code Birth | Hospital providing the service at birth | 100% | 100% | 100% | 100% |
| Age of Mother Birth | Mother's age at time of birth | 100% | 100% | 100% | 100% |
| Parity | Number of times the woman has given birth | 90% | 94% | 96% | 96% |
| Mode of Onset of Labour | The method by which the process of labour began | 96% | 96% | 96% | 95% |
| Mode of Birth | The procedure by which the mother is delivered of the baby | 100% | 100% | 100% | 100% |
| Perineal Trauma | Weather the woman experienced a 3rd or 4th degree tear during childbirth | 88% | 95% | 95% | 96% |
| Augmentation Code | Whether medical or surgical augmentation of labour was undertaken in order to accelerate labour | 88% | 88% | 87% | 85% |
| Epidural Code | Whether epidural was administered for pain relief | 84% | 84% | 85% | 84% |
| Episiotomy Code | Whether the woman had an episiotomy during childbirth | 95% | 98% | 99% | 99% |
| Estimated Blood Loss | The estimated post-partum blood loss (measured in ml) | 97% | 99% | 99% | 99% |
| Mother's Intention to Breastfeed | Intention of the mother to breatsfeed her baby at birth | 96% | 97% | 97% | 97% |
| Smoking Birth | Mother's smoking status at the time of birth | 97% | 97% | 98% | 97% |
| Birth Outcome | Outcome of the birth, live birth or still birth | 100% | 100% | 100% | 100% |
| Apgar 5 min | The total apgar score for a baby at 5 minutes after birth. | 98% | 99% | 99% | 99% |
| Gestation at Birth | Best estimate of gestation (in completeed weeks) at time of delivery, normally based on post menstrual age but may be modified on the basis of ultrasound scan | 99% | 98% | 98% | 98% |
| Birth Weight | First weight of baby following delivery, preferably in the first hour of life | 99% | 100% | 100% | 100% |

Note that when making comparisons between data items, whether it is between health boards or over different years, it is important to be aware of the data completeness because any differences might be attributed to the increased/decreased data availability, rather than actual differences.

# Annex 2: Data completeness National Community Child Health Database 2009-2019

| | | % Completeness | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Data Item Name** | **Data ItemTerm** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** |
| Trust Number | Unique number identifying the Trust | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Date of Birth | Date of Birth of Child | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Time of Birth | Time of Birth of Child | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Sex | Gender of the Child | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Ward Code | Electoral and Census | 99% | 100% | 100% | 99% | 99% | 99% | 100% | 100% | 100% | 100% | 100% |
| LHB | The Local Health Board with responsibility for the Child based on residence | 99% | 99% | 99% | 99% | 99% | 99% | 100% | 100% | 100% | 100% | 100% |
| Initial Status | The reason why the record was initially created and the date of creation | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Current Status | The reason why the child has reached its current status and the date it reached this status | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| GP Practice | The OCS code for the current GP practice of the child | 99% | 99% | 99% | 98% | 99% | 99% | 99% | 99% | 99% | 99% | 99% |
| HV Code | The current Health Visitor code for the child | 99% | 99% | 99% | 98% | 99% | 98% | 98% | 99% | 99% | 99% | 99% |
| Number Born | The number of births resulting from the pregnancy | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Birth Order | The order of the birth where more than one birth resulted from the pregnancy | 100% | 93% | 99% | 99% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Birth Weight | First weight of baby following delivery, preferably in the first hour of life | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Age of Mother | Mother's age at time of birth | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Ethnic Group | The ethnicity of the child as defined by the mother | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 98% | 100% | 100% |
| Mode of Delivery | The procedure by which the mother is delivered of the baby | 65% | 69% | 70% | 70% | 63% | 63% | 62% | 62% | 61% | 61% | 59% |
| Onset of Labour | The method by which the process of labour began | 69% | 69% | 69% | 69% | 62% | 61% | 61% | 61% | 60% | 60% | 59% |
| Breast Feeding at Birth (a) | Indicator of mother's intention to breast or bottle feed, baby being breast or bottle fed at birth | 89% | 89% | 90% | 92% | 82% | 77% | 82% | 90% | 93% | 95% | 93% |
| Breast Feeding at 6 weeks | Indicator of mother's actual feeding, either breast or bottle age of 8 weeks | 61% | 63% | 62% | 71% | 65% | 86% | 93% | 88% | 85% | 80% | 65% |
| Smoking History | The number of cigarettes that the mother smokes each day | 65% | 65% | 65% | 66% | 60% | 57% | 59% | 60% | 59% | 58% | 57% |
| Maternal Care | The type of maternal care | 58% | 58% | 60% | 60% | 60% | 56% | 58% | 56% | 52% | 52% | 47% |
| Gestational Age | Best estimate of gestation at time of delivery, normally based on post menstrual age but may be modified on the basis of ultrasound scan | 99% | 100% | 100% | 100% | 98% | 100% | 100% | 100% | 100% | 100% | 100% |
| Apgar Score 1 min | The total apgar score for a baby at 1 minute after birth. | 70% | 70% | 70% | 70% | 94% | 95% | 95% | 95% | 94% | 94% | 95% |
| Apgar Score 5 min | The total apgar score for a baby at 5 minutes after birth. | 91% | 90% | 93% | 93% | 94% | 94% | 94% | 95% | 94% | 94% | 95% |
| Place of Birth | Actual place of child's birth, i.e. hospital number or home | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

# Annex 3: Glossary of terms

## Data items relating to the Initial assessment

### Initial assessment

This is the date on which a pregnant woman was first assessed by hospital staff and arrangements were made for antenatal care. This is not necessarily the occasion on which arrangements were made for delivery.

### Date of initial assessment / booking visit

The date of the initial maternity assessment / booking visit where a full Health & Social Care Needs Assessment is undertaken and the antenatal sections of the maternity hand held record are completed.

### Gestation period at initial assessment / booking visit

The gestation period at initial assessment / booking visit, in completed weeks (rounded down).

### Gravida

Gravida indicates the number of times the woman has been pregnant, regardless of whether these pregnancies were carried to term. A current pregnancy, if any, is included in this count.

### Maternal height at initial assessment / booking visit

The height of the woman (in cm) as measured at the Initial Assessment (Booking Visit), or within the 10-12 week gestation period (when not undertaken at Initial Assessment).

### Maternal weight at initial assessment / booking visit

The weight of the woman (in kg, to the nearest 100g), as measured at the Initial Assessment (Booking Visit), or within the 10-12 week gestation period (when not undertaken at Initial Assessment).

### Smoker at initial assessment / booking visit

The smoking status of the woman at the time of the Initial Assessment / Booking Visit – i.e. is the woman a smoker? Wherever possible, this should be validated via Carbon Monoxide testing (i.e. CO-validated). Where not CO-validated, this should be the self-reported smoking status of the mother.

### Existing mental health condition

The woman reports that she has one of the following mental health conditions:

- Puerperal psychosis (severe postnatal depression)
- Bi-polar effective disorder/manic depression
- Psychosis
- Psychotic depression
- Schizophrenia
- Other

### Mental Health Care Plan

To establish whether the woman has had a Mental Health Care Plan put in place within 4 weeks following the initial assessment.

A Mental Health Care and Treatment plan will:

a) Be developed by a care coordinator in consultation with the service users and mental health providers (although the plan may be developed without the input of the patient where the outcomes cannot be agreed between all parties);

b) Record the outcomes that the provision of mental health services for the relevant patient are designed to achieve;

c) List these outcomes, record the services and/or actions that are to be provided to achieve each outcome, including when they will be provided, and state who is responsible for providing the service as well as where it will take place;

d) Be kept under review and updated to reflect any changes in the type of care and treatment which may be required by the service user over time.

**Parity**

The parity group of the mother. Parity is the number of times a woman has given birth to a live neonate (any gestation) or at 24 weeks or more, regardless of whether the child was viable or non-viable (i.e. still births). Includes:

Nulliparous – the mother has never previously given birth

Primiparous – the mother has previously given birth once only

Multiparous – the mother has previously given birth more than once

**Previous caesarean sections**

The number of previous caesarean sections performed on the woman. A caesarean section is an operation to deliver a baby. It involves making a cut in the front wall of a woman's abdomen and womb. The operation can be a planned (elective) procedure – when a medical need for the operation becomes apparent during pregnancy or if it's requested by the mother in advance.

## Data items relating to labour and delivery

**Maternal weight at 36-38 weeks or onset of labour**

The weight of the woman (in kg, to the nearest 100g), as measured at 36-38 weeks, or at onset of labour. The aim is that the information relates to a point as late in the pregnancy as is practically possible.

**Smoker at 36-38 weeks or onset of labour**

The smoking status of the woman at 36-38 weeks, or onset of labour – i.e. is the woman a smoker?

Wherever possible, this should be validated via Carbon Monoxide testing (i.e. CO-validated). Where not CO-validated, this should be the self-reported smoking status of the mother. The aim is that the information relates to a point as late in the pregnancy as is practically possible.

**Mode of onset of labour**

This is the method by which the process of labour began or delivery by a caesarean section occurred. Only those methods that are used to induce labour, such as surgical induction, medical induction or a combination of the two, should be recorded. Methods that are used to accelerate labour should not be recorded. Includes:

- Spontaneous; the onset of regular contractions whether or not preceded by spontaneous rupture of the membranes.
- 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.
- Surgical induction; by amniotomy
- Medical induction; including the administration of agents either orally, intravenously or intra vaginally with the intention of initiating labour.
- Combination of surgical induction and medical induction.

**Augmentation in labour**

Whether medical or surgical augmentation of labour was undertaken in order to accelerate labour. The augmentation of labour is an intervention that is intended to increase the intensity of labour, usually when the caregiver feels the labour is not 'progressing', or is progressing too slowly. Augmentation of labour differs from induction, in that the labour has already started in some way, but is not progressing, has slowed or stopped. This can also include interventions to stimulate contractions after the waters have broken on their own (although some caregivers will refer to this as an induction). Augmenting the labour involves artificial stimulation of the contractions. This may be needed if the contractions have become weak, not coordinated (or irregular), far apart, not lasting long enough or have ceased for a period. If the labour needs augmenting, it means the contractions are not efficient enough to dilate the cervix.

**Gestation at onset of labour**

The gestation period at onset of labour, in completed weeks (rounded down). Gestation is the carrying of an embryo or foetus inside a woman. The time interval of a gestation is known as the gestation period.

**Number of foetus at onset of labour**

The number of foetus at onset of labour.

**Estimated blood loss**

The estimated post-partum blood loss (measured in millilitres – ml)

**Epidural status**

Epidural administered for pain relief. An Epidural is an injection of a 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.

**Episiotomy**

Did the woman have an episiotomy during childbirth?

Episiotomy is a surgical cut made at the opening of the vagina during childbirth, to aid a difficult delivery and prevent rupture of tissues.

**Perineal trauma**

Did the woman experience a 3rd or 4th degree tear during childbirth? This can be recorded as 'not applicable', if for example the woman has had a caesarean section.

**Foetal lie at onset of labour**

The lie of the foetus at onset of labour including transverse, oblique, longitudinal and other. A foetal lie of transverse is compatible with a foetal presentation of other or not known only. It must not be used if the presentation is cephalic or breech. Conversely, a foetal lie of oblique or longitudinal may only be used where the foetal presentation is cephalic, breech or other

**Foetal presentation at onset of labour**

The presentation of the foetus at onset of labour including cephalic, breech, other – i.e. a transverse / other lie or not known. The reported presentation may be different for each baby born in a multiple birth.

**Mode of birth**

The mode of birth of a baby. Note that this may be different for different foetuses in the same delivery. Includes: spontaneous vaginal birth, ventouse, forceps, elective caesarean section - caesarean section before, or at onset of labour, emergency caesarean section.

**Outcome of birth**

An indicator of whether the birth was a live or a stillbirth (a birth on or after a gestation of 24 weeks (168 days) where the baby shows no identifiable signs of life at delivery).

**Birthweight**

The weight of the baby at birth, recorded in grams.

**Time of birth**

This is the time of birth of the child.

**Birth order**

The order of the birth where more than one birth resulted from pregnancy.

**APGAR score**

The APGAR score is a measure of the physical condition of a new-born baby. It is obtained by adding points (2, 1, or 0) for heart rate, respiratory effort, muscle tone, response to stimulation and skin coloration; a score of ten represents the best possible condition. The Maternity Indicators dataset records the total APGAR score for a baby at 5 minutes after birth.

**Breast feeding**

Did the mother intend to breastfeed the baby at birth?

**Healthy births**

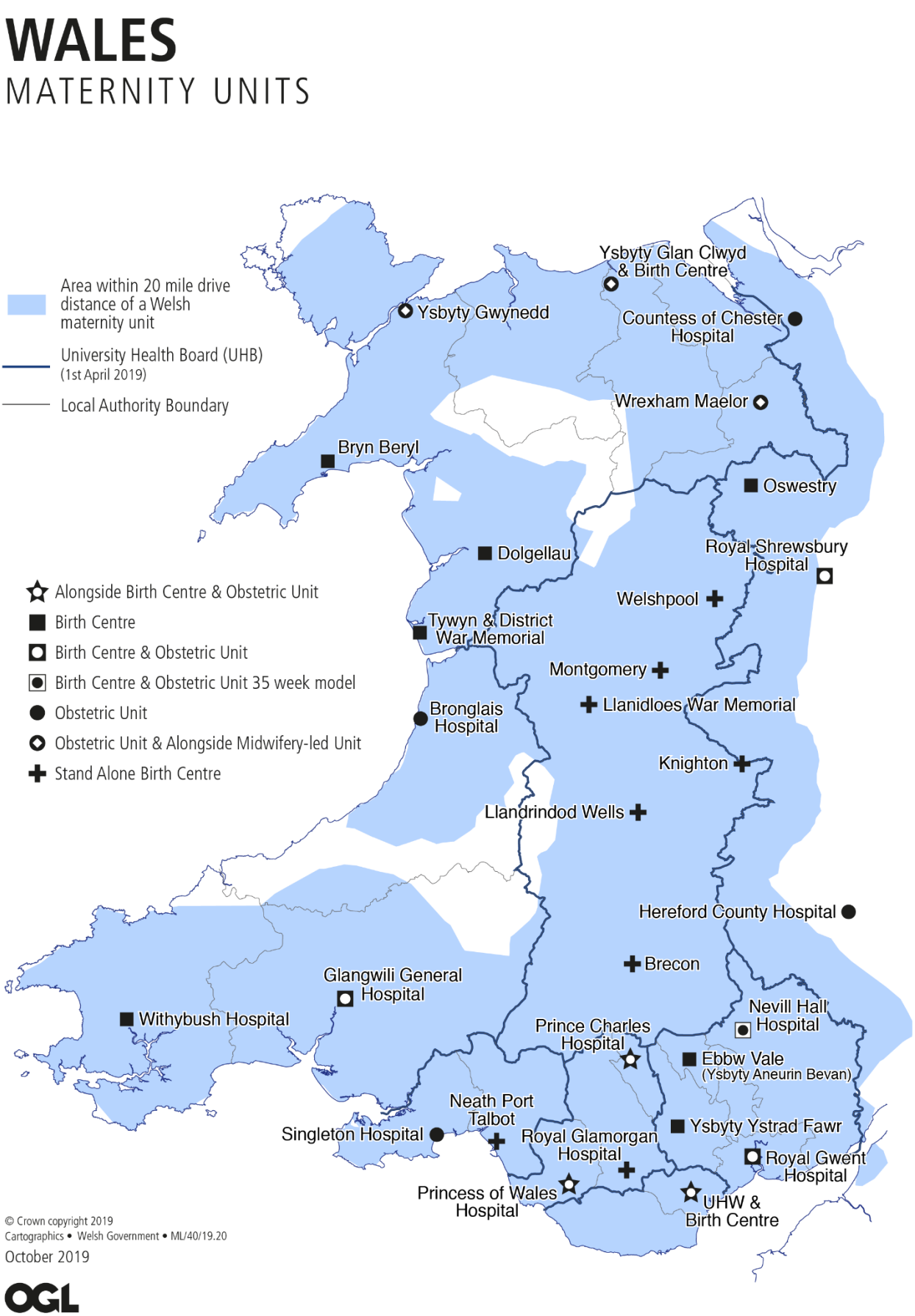
The percentage of births considered to be healthy births. Any of the following criteria exclude the birth from being considered as ‘healthy’:

- an onset of labour other than spontaneous;
- augmentation in labour;
- caesarean section, use of forceps or ventouse;
- a gestational age of <37 weeks;
- still birth;
- epidural in labour;
- 3rd or 4th degree perineal trauma or episiotomy;
- a birthweight of <2500g or >4000g;
- blood loss of >500ml; and
- APGAR score at 5 minutes <7.

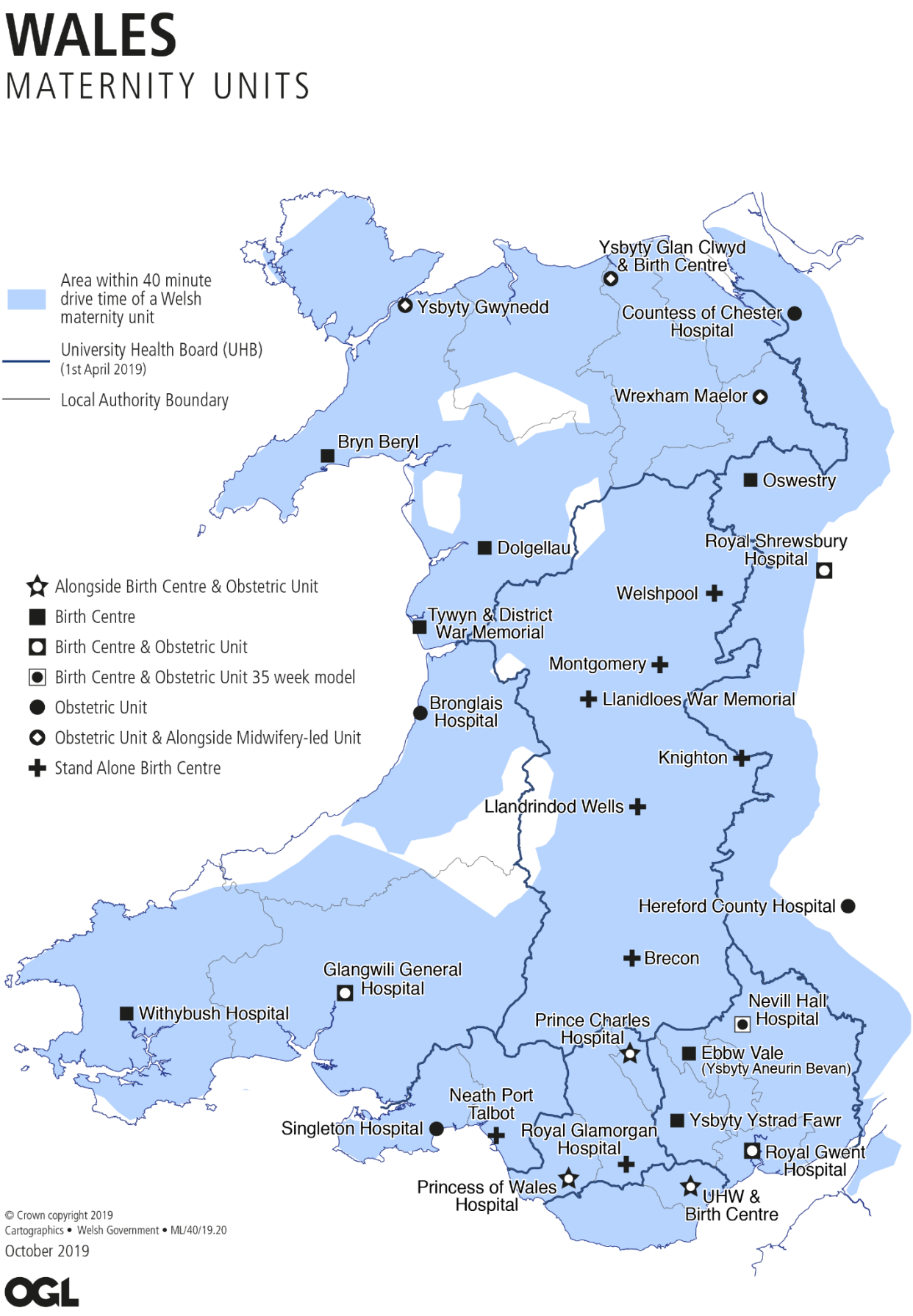
Only complete records were included in the healthy births analysis i.e. each record must have valid entries to all the fields related to the above criteria to be included. Some unhealthy births are identifiable from incomplete records but they have not been included in the analysis as a healthy birth can only be identified where the record is complete.

## Annex 4:

**Map 1: Maternity units in Wales – areas in blue are within a 20 mile driving distance of a unit**



**Map 2: Maternity units in Wales – areas in blue are within a 40 minute driving time of a unit**



# Annex 5: Additional tables

## Table 15: Births by local authority and place of birth, 2019

| | Number | | | | | | Per cent (a) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Place of birth | | | | | | Place of birth | | | |
| | Births in Wales | | | | Births outside Wales | | Births in Wales | | | Births outside Wales |
| LHB / LA of residence | Welsh hospital | Ambulance | Home | Not stated | English hospital | All births | Welsh hospital | Ambulance | Home | English hospital |
| **Betsi Cadwaladr** | **5,724** | **6** | **145** | **13** | **462** | **6,350** | **90%** | **0%** | **2%** | **7%** |
| Isle of Anglesey | 547 | 0 | 9 | 2 | 10 | 568 | 97% | 0% | 2% | 2% |
| Gwynedd | 977 | 4 | 27 | 1 | 6 | 1,015 | 96% | 0% | 3% | 1% |
| Conwy | 969 | 0 | 23 | 3 | 7 | 1,002 | 97% | 0% | 2% | 1% |
| Denbighshire | 949 | 1 | 25 | 5 | 6 | 986 | 97% | 0% | 3% | 1% |
| Flintshire | 961 | 1 | 31 | 1 | 394 | 1,388 | 69% | 0% | 2% | 28% |
| Wrexham | 1,321 | 0 | 30 | 1 | 39 | 1,391 | 95% | 0% | 2% | 3% |
| **Powys** | **651** | **1** | **88** | **13** | **261** | **1,014** | **65%** | **0%** | **9%** | **26%** |
| **Hywel Dda** | **3,057** | **3** | **128** | **13** | **0** | **3,201** | **96%** | **0%** | **4%** | **0%** |
| Ceredigion | 494 | 0 | 19 | 4 | 0 | 517 | 96% | 0% | 4% | 0% |
| Pembrokeshire | 980 | 1 | 50 | 3 | 0 | 1,034 | 95% | 0% | 5% | 0% |
| Carmarthenshire | 1,583 | 2 | 59 | 6 | 0 | 1,650 | 96% | 0% | 4% | 0% |
| **Swansea Bay** | **3,420** | **6** | **103** | **11** | **0** | **3,540** | **97%** | **0%** | **3%** | **0%** |
| Swansea | 2,193 | 4 | 62 | 7 | 0 | 2,266 | 97% | 0% | 3% | 0% |
| Neath Port Talbot | 1,227 | 2 | 41 | 4 | 0 | 1,274 | 97% | 0% | 3% | 0% |
| **Cardiff and Vale** | **4,861** | **0** | **88** | **27** | **0** | **4,976** | **98%** | **0%** | **2%** | **0%** |
| Vale of Glamorgan | 1,160 | 0 | 38 | 6 | 0 | 1,204 | 97% | 0% | 3% | 0% |
| Cardiff | 3,701 | 0 | 50 | 21 | 0 | 3,772 | 99% | 0% | 1% | 0% |
| **Cwm Taf Morgannwg** | **4,365** | **0** | **72** | **22** | **7** | **4,466** | **98%** | **0%** | **2%** | **0%** |
| Rhondda Cynon Taf | 2,404 | 0 | 34 | 8 | 4 | 2,450 | 98% | 0% | 1% | 0% |
| Merthyr Tydfil | 634 | 0 | 2 | 2 | 3 | 641 | 99% | 0% | 0% | 0% |
| Bridgend | 1,327 | 0 | 36 | 12 | 0 | 1,375 | 97% | 0% | 3% | 0% |
| **Aneurin Bevan** | **5,926** | **23** | **94** | **50** | **5** | **6,098** | **98%** | **0%** | **2%** | **0%** |
| Caerphilly | 1,710 | 9 | 20 | 11 | 3 | 1,753 | 98% | 1% | 1% | 0% |
| Blaenau Gwent | 730 | 2 | 8 | 3 | 0 | 743 | 99% | 0% | 1% | 0% |
| Torfaen | 956 | 2 | 13 | 2 | 0 | 973 | 98% | 0% | 1% | 0% |
| Monmouthshire | 640 | 2 | 13 | 21 | 2 | 678 | 97% | 0% | 2% | 0% |
| Newport | 1,890 | 8 | 40 | 13 | 0 | 1,951 | 98% | 0% | 2% | 0% |
| Not stated | 52 | 1 | 1 | 16 | 13 | 83 | 78% | 1% | 1% | 19% |
| **Wales** | **28,056** | **40** | **719** | **165** | **748** | **29,728** | **95%** | **0%** | **2%** | **3%** |
| Not Welsh resident | 326 | .. | .. | .. | .. | 326 | 100% | .. | .. | .. |

Source: National Community Child Health Database
(a) Percentage of records with a stated place of birth
.. Data item not available
Note some births in Bridgend would have taken place in the previous Abertawe Bro Morgannwg health board, which was replaced by Swansea Bay in April 2019. From 1 April, Bridgend belongs to the Cwm Taf Morgannwg health board.

## Table 16: Live births by gestational age and selected indicators, Wales 2019

| | Number of weeks gestation: | | | | | |
|---|---|---|---|---|---|---|
| **Birthweight** | **20-31** | **32-36** | **37-41** | **42 or more** | **Not stated** | **Total** |
| **Under 2500g** | 330 | 1,016 | 774 | 10 | 11 | 2,141 |
| **2500-3999g** | 26 | 984 | 22,264 | 857 | 74 | 24,205 |
| **4000g or more** | 4 | 23 | 3,016 | 265 | 6 | 3,314 |
| **Not stated** | 32 | 15 | 16 | 1 | 4 | 68 |
| **Total** | **392** | **2,038** | **26,070** | **1,133** | **95** | **29,728** |

| | Number of weeks gestation: | | | | | |
|---|---|---|---|---|---|---|
| **Mother's age (years)** | **20-31** | **32-36** | **37-41** | **42 or more** | **Not stated** | **Total** |
| **Under 16** | 0 | 3 | 20 | 1 | 0 | 24 |
| **16-19** | 18 | 70 | 970 | 41 | 6 | 1,105 |
| **20-24** | 73 | 332 | 4,568 | 209 | 17 | 5,199 |
| **25-29** | 101 | 591 | 7,748 | 343 | 25 | 8,808 |
| **30-34** | 101 | 591 | 7,968 | 357 | 25 | 9,042 |
| **35-39** | 78 | 342 | 3,927 | 166 | 16 | 4,529 |
| **40-44** | 17 | 99 | 815 | 14 | 4 | 949 |
| **45 or over** | 4 | 10 | 48 | 1 | 0 | 63 |
| **Not stated** | 0 | 0 | 6 | 1 | 2 | 9 |
| **Total** | **392** | **2,038** | **26,070** | **1,133** | **95** | **29,728** |

Source: National Community Child Health Database
Gestations less than 20 weeks or more than 45 weeks included as "not stated"
Mother's age less than 10 and more than 54 included as "not stated"
Birthweight less than 0.5kg or more than 6kg included as "not stated"

## Table 17: Live births by birthweight and mother's age, Wales 2019

| **Mother's age (years)** | **Under 2000g** | **2000-2499g** | **2500-2999g** | **3000-3999g** | **4000g or more** | **Not stated** | **Total** |
|---|---|---|---|---|---|---|---|
| **Under 16** | 1 | 0 | 5 | 18 | 0 | 0 | 24 |
| **16-19** | 31 | 61 | 232 | 705 | 76 | 0 | 1,105 |
| **20-24** | 142 | 274 | 916 | 3,400 | 456 | 11 | 5,199 |
| **25-29** | 216 | 407 | 1,334 | 5,871 | 960 | 20 | 8,808 |
| **30-34** | 220 | 341 | 1,309 | 5,987 | 1,164 | 21 | 9,042 |
| **35-39** | 135 | 215 | 715 | 2,893 | 562 | 9 | 4,529 |
| **40-44** | 29 | 56 | 155 | 612 | 91 | 6 | 949 |
| **45 or over** | 8 | 4 | 11 | 36 | 4 | 0 | 63 |
| **Not stated** | 0 | 1 | 0 | 6 | 1 | 1 | 9 |
| **Total** | **782** | **1,359** | **4,677** | **19,528** | **3,314** | **68** | **29,728** |

Source: National Community Child Health Database
Mother's age less than 10 and more than 54 included as "not stated"
Birthweight less than 0.5kg or more than 6kg included as "not stated"

## Table 18: Live births by breastfeeding (a) and selected indicators, Wales 2019

| Mother's age (years) | Breastfeeding | Not breastfeeding | Not stated | Total |
|---|---|---|---|---|
| **Under 16** | 7 | 15 | 2 | 24 |
| **16-19** | 406 | 622 | 77 | 1,105 |
| **20-24** | 2,396 | 2,448 | 355 | 5,199 |
| **25-29** | 4,921 | 3,361 | 526 | 8,808 |
| **30-34** | 5,808 | 2,704 | 530 | 9,042 |
| **35-39** | 3,040 | 1,217 | 272 | 4,529 |
| **40-44** | 638 | 253 | 58 | 949 |
| **45 or over** | 39 | 15 | 9 | 63 |
| **Not stated** | 6 | 2 | 1 | 9 |
| **Total** | **17,261** | **10,637** | **1,830** | **29,728** |

| Gestational age (weeks) | Breastfeeding | Not breastfeeding | Not stated | Total |
|---|---|---|---|---|
| **20-31** | 188 | 82 | 122 | 392 |
| **32-36** | 1,016 | 858 | 164 | 2,038 |
| **37-41** | 15,307 | 9,291 | 1,472 | 26,070 |
| **42 or more** | 716 | 367 | 50 | 1,133 |
| **Not stated** | 34 | 39 | 22 | 95 |
| **Total** | **17,261** | **10,637** | **1,830** | **29,728** |

| Birthweight | Breastfeeding | Not breastfeeding | Not stated | Total |
|---|---|---|---|---|
| **Under 2000g** | 387 | 236 | 159 | 782 |
| **2000-2499g** | 656 | 600 | 103 | 1,359 |
| **2500-2999g** | 2,424 | 1,982 | 271 | 4,677 |
| **3000-3999g** | 11,660 | 6,757 | 1,111 | 19,528 |
| **4000g or more** | 2,114 | 1,044 | 156 | 3,314 |
| **Not stated** | 20 | 18 | 30 | 68 |
| **Total** | **17,261** | **10,637** | **1,830** | **29,728** |

| Place of birth | Breastfeeding | Not breastfeeding | Not stated | Total |
|---|---|---|---|---|
| **Home** | 483 | 176 | 60 | 719 |
| **Hospital** | 16,675 | 10,421 | 1,708 | 28,804 |
| **Ambulance** | 21 | 15 | 4 | 40 |
| **Not stated** | 82 | 25 | 58 | 165 |
| **Total** | **17,261** | **10,637** | **1,830** | **29,728** |

Source: National Community Child Health Database

(a) Breastfeeding at birth data for 2012 onwards is based on new breastfeeding definitions introduced in September 2012.
Gestations less than 20 weeks or more than 45 weeks included as "not stated".
Mother's age less than 10 and more than 54 included as "not stated".
Birthweight less than 0.5kg or more than 6kg included as "not stated".

## Table 19: Live births by selected indicators, Wales 2006-2019

| Place of birth | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Home** | 1,144 | 1,224 | 1,281 | 1,291 | 1,227 | 1,080 | 1,063 | 987 | 1,048 | 944 | 858 | 770 | 712 | 719 |
| **Hospital** | 32,391 | 33,120 | 34,324 | 33,559 | 34,657 | 34,366 | 34,059 | 32,632 | 32,380 | 32,262 | 32,028 | 31,324 | 30,412 | 28,804 |
| **Ambulance** | 127 | 104 | 25 | 17 | 16 | 18 | 19 | 19 | 53 | 56 | 38 | 48 | 75 | 40 |
| **Not stated** | 28 | 21 | 125 | 135 | 133 | 218 | 209 | 184 | 167 | 99 | 80 | 94 | 130 | 165 |
| **Total** | **33,690** | **34,469** | **35,755** | **35,002** | **36,033** | **35,682** | **35,350** | **33,822** | **33,648** | **33,361** | **33,004** | **32,236** | **31,329** | **29,728** |

| Mother's age (years) | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Under 16** | 89 | 79 | 86 | 74 | 66 | 57 | 58 | 46 | 37 | 39 | 40 | 31 | 20 | 24 |
| **16-19** | 3,027 | 2,945 | 3,016 | 2,839 | 2,720 | 2,409 | 2,214 | 1,887 | 1,690 | 1,490 | 1,455 | 1,379 | 1,177 | 1,105 |
| **20-24** | 7,614 | 7,780 | 8,194 | 8,195 | 8,325 | 8,115 | 7,965 | 7,363 | 6,893 | 6,582 | 6,140 | 5,874 | 5,614 | 5,199 |
| **25-29** | 8,656 | 9,301 | 9,894 | 10,035 | 10,350 | 10,268 | 10,137 | 10,055 | 10,125 | 10,212 | 10,151 | 9,655 | 9,579 | 8,808 |
| **30-34** | 8,605 | 8,463 | 8,518 | 8,214 | 8,779 | 9,107 | 9,396 | 9,014 | 9,429 | 9,430 | 9,328 | 9,485 | 9,179 | 9,042 |
| **35-39** | 4,764 | 4,884 | 5,018 | 4,620 | 4,690 | 4,618 | 4,438 | 4,334 | 4,399 | 4,562 | 4,829 | 4,764 | 4,767 | 4,529 |
| **40-44** | 875 | 941 | 974 | 970 | 1,022 | 1,053 | 1,066 | 1,031 | 1,010 | 976 | 978 | 970 | 921 | 949 |
| **45 or over** | 40 | 49 | 46 | 41 | 72 | 51 | 63 | 69 | 54 | 55 | 73 | 68 | 68 | 63 |
| **Not stated** | 20 | 27 | 9 | 14 | 9 | 4 | 13 | 23 | 11 | 15 | 10 | 10 | 4 | 9 |
| **Total** | **33,690** | **34,469** | **35,755** | **35,002** | **36,033** | **35,682** | **35,350** | **33,822** | **33,648** | **33,361** | **33,004** | **32,236** | **31,329** | **29,728** |

| Gestational age (weeks | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **<24** | 22 | 24 | 25 | 25 | 29 | 32 | 21 | 20 | 21 | 22 | 22 | 29 | 27 | 29 |
| **24-27** | 117 | 127 | 104 | 132 | 126 | 132 | 130 | 125 | 100 | 120 | 91 | 95 | 103 | 116 |
| **28-31** | 292 | 265 | 333 | 300 | 305 | 279 | 305 | 273 | 248 | 248 | 272 | 282 | 244 | 247 |
| **32-36** | 2,048 | 2,168 | 2,094 | 2,120 | 2,067 | 2,094 | 2,031 | 1,917 | 2,092 | 2,057 | 2,171 | 2,127 | 2,150 | 2,038 |
| **37-41** | 29,122 | 30,072 | 31,199 | 30,592 | 31,654 | 31,036 | 30,946 | 29,264 | 29,697 | 29,616 | 29,112 | 28,391 | 27,546 | 26,070 |
| **42+** | 1,780 | 1,588 | 1,718 | 1,546 | 1,700 | 1,949 | 1,767 | 1,487 | 1,420 | 1,252 | 1,181 | 1,171 | 1,167 | 1,133 |
| **Not stated** | 309 | 225 | 282 | 287 | 152 | 160 | 150 | 736 | 70 | 46 | 155 | 141 | 92 | 95 |
| **Total** | **33,690** | **34,469** | **35,755** | **35,002** | **36,033** | **35,682** | **35,350** | **33,822** | **33,648** | **33,361** | **33,004** | **32,236** | **31,329** | **29,728** |

| Birth weight | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Under 2000g** | 887 | 880 | 916 | 882 | 911 | 861 | 932 | 853 | 754 | 777 | 777 | 779 | 803 | 782 |
| **2000-2499g** | 1,524 | 1,563 | 1,591 | 1,623 | 1,552 | 1,542 | 1,580 | 1,492 | 1,488 | 1,455 | 1,499 | 1,453 | 1,451 | 1,359 |
| **2500-2999g** | 5,352 | 5,485 | 5,576 | 5,586 | 5,589 | 5,604 | 5,657 | 5,341 | 5,162 | 5,276 | 5,254 | 4,974 | 4,977 | 4,677 |
| **3000-3999g** | 21,915 | 22,358 | 23,334 | 22,811 | 23,557 | 23,387 | 23,010 | 22,081 | 22,091 | 21,822 | 21,525 | 21,166 | 20,368 | 19,528 |
| **4000g or more** | 3,909 | 4055 | 4,271 | 4,023 | 4,345 | 4,249 | 4,138 | 4,010 | 4,095 | 3,956 | 3,809 | 3,787 | 3,649 | 3,314 |
| **Not stated** | 103 | 128 | 67 | 77 | 79 | 39 | 33 | 45 | 58 | 75 | 140 | 77 | 81 | 68 |
| **Total (a)** | **33,690** | **34,469** | **35,755** | **35,002** | **36,033** | **35,682** | **35,350** | **33,822** | **33,648** | **33,361** | **33,004** | **32,236** | **31,329** | **29,728** |
| **Singleton birth <2500g** | 1,896 | 1,892 | 1,878 | 1,954 | 1,929 | 1,877 | 1,861 | 1,750 | 1,665 | 1,660 | 1,706 | 1,763 | 1,713 | 1,720 |
| **Total singleton with stated birth weight** | **32,677** | **33,381** | **34,599** | **33,903** | **34,945** | **34,690** | **34,246** | **32,784** | **32,595** | **32,251** | **31,884** | **31,360** | **30,378** | **29,004** |

| Breastfeeding (a) | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Breastfeeding** | 15,445 | 15,959 | 17,810 | 18,032 | 17,983 | 18,062 | 16,918 | 15,677 | 15,171 | 16,246 | 18,254 | 18,276 | 18,433 | 17,261 |
| **Not breastfeeding** | 12,580 | 12,551 | 13,777 | 13,793 | 14,524 | 14,469 | 13,406 | 12,367 | 11,041 | 10,956 | 11,722 | 11,931 | 11,471 | 10,637 |
| **Not stated** | 5,665 | 5,959 | 4,168 | 3,177 | 3,526 | 3,151 | 5,026 | 5,778 | 7,436 | 6,159 | 3,028 | 2,029 | 1,425 | 1,830 |
| **Total** | **33,690** | **34,469** | **35,755** | **35,002** | **36,033** | **35,682** | **35,350** | **33,822** | **33,648** | **33,361** | **33,004** | **32,236** | **31,329** | **29,728** |

| Number of Babies | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1 Baby** | 32,769 | 33,503 | 34,658 | 33,968 | 35,019 | 34,723 | 34,276 | 32,823 | 32,646 | 32,318 | 32,001 | 31,422 | 30,453 | 29,004 |
| **More than 1 Baby** | 916 | 966 | 1,097 | 1,034 | 1,014 | 959 | 1,074 | 999 | 1,002 | 1,043 | 1,003 | 814 | 876 | 724 |
| **Not stated** | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **33,690** | **34,469** | **35,755** | **35,002** | **36,033** | **35,682** | **35,350** | **33,822** | **33,648** | **33,361** | **33,004** | **32,236** | **31,329** | **29,728** |

Source: National Community Child Health Database

(a) Breastfeeding at birth data for 2012 onwards is based on new breastfeeding definitions introduced in September 2012.
Gestations less than 20 weeks or more than 45 weeks included as "not stated".
Mother's age less than 10 and more than 54 included as "not stated".
Birthweight less than 0.5kg or more than 6kg included as "not stated".

## Table 20: Key statistics for live births, Wales 2006-2019

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Live births** | 33,690 | 34,469 | 35,755 | 35,002 | 36,033 | 35,682 | 35,350 | 33,822 | 33,648 | 33,361 | 33,004 | 32,236 | 31,329 | 29,728 |
| **Homebirths** | 3.4% | 3.6% | 3.6% | 3.7% | 3.4% | 3.0% | 3.0% | 2.9% | 3.1% | 2.8% | 2.6% | 2.6% | 2.3% | 2.4% |
| **Mothers aged under 20** | 9.3% | 8.8% | 8.7% | 8.3% | 7.7% | 6.9% | 6.4% | 5.7% | 5.1% | 4.6% | 4.5% | 4.4% | 3.8% | 3.8% |
| **Gestational age < 37 weeks** | 7.4% | 7.5% | 7.2% | 7.4% | 7.0% | 7.1% | 7.1% | 7.1% | 7.3% | 7.3% | 7.8% | 7.9% | 8.1% | 8.2% |
| **All babies - Low birth weight (<2500g** | 7.2% | 7.1% | 7.0% | 7.2% | 6.9% | 6.7% | 7.1% | 6.9% | 6.7% | 6.7% | 6.9% | 6.9% | 7.2% | 7.2% |
| **Singleton - Low birth weight (<2500g** | 5.8% | 5.7% | 5.4% | 5.8% | 5.5% | 5.4% | 5.4% | 5.3% | 5.1% | 5.1% | 5.4% | 5.6% | 5.6% | 5.9% |
| **Breastfeeding (a)** | 55.1% | 56.0% | 56.4% | 56.7% | 55.3% | 55.5% | 55.8% | 55.9% | 57.9% | 59.7% | 60.9% | 60.9% | 61.6% | 61.9% |
| **Multiple births** | 2.7% | 2.8% | 3.1% | 3.0% | 2.8% | 2.7% | 3.0% | 3.0% | 3.0% | 3.1% | 3.0% | 2.5% | 2.8% | 2.4% |

Source: National Community Child Health Database

(a) Breastfeeding at birth data for 2012 onwards is based on new breastfeeding definitions introduced in September 2012.
Percentages are of the total live births less births with no stated place of birth / mother's age / gestational age / birthweight / breastfeeding status. In addition:
Gestations less than 20 weeks or more than 45 weeks included as "not stated".
Mother's age less than 10 and more than 54 included as "not stated".
Birthweight less than 0.5kg or more than 6kg included as "not stated".

## Table 21: Live births by ethnicity, Wales 2018-2019

| **Ethnicity** | *Number* | |
|---|---|---|
| | **2018** | **2019** |
| African | 240 | 272 |
| Any Other Asian background | 240 | 232 |
| Any other Black background | 55 | 61 |
| Any other ethnic group | 313 | 324 |
| Any Other Mixed Background | 417 | 405 |
| Any White Background | 19,559 | 18,316 |
| Bangladeshi | 167 | 177 |
| Caribbean | 23 | 24 |
| Chinese | 53 | 52 |
| Indian | 169 | 134 |
| Pakistani | 208 | 218 |
| White and Asian | 158 | 169 |
| White and Black African | 106 | 103 |
| White and Black Caribbean | 118 | 143 |
| Not stated | 9,503 | 9,098 |
| **Total** | **31,329** | **29,728** |

| | *Per cent (a)* | |
|---|---|---|
| | **2018** | **2019** |
| African | 1.1 | 1.3 |
| Any Other Asian background | 1.1 | 1.1 |
| Any other Black background | 0.3 | 0.3 |
| Any other ethnic group | 1.4 | 1.6 |
| Any Other Mixed Background | 1.9 | 2.0 |
| Any White Background | 89.6 | 88.8 |
| Bangladeshi | 0.8 | 0.9 |
| Caribbean | 0.1 | 0.1 |
| Chinese | 0.2 | 0.3 |
| Indian | 0.8 | 0.6 |
| Pakistani | 1.0 | 1.1 |
| White and Asian | 0.7 | 0.8 |
| White and Black African | 0.5 | 0.5 |
| White and Black Caribbean | 0.5 | 0.7 |
| **Total** | **100** | **100** |
| % Not stated | 30.3 | 30.6 |

Source: National Community Child Health Database
(a) The percentages are of the total records less records with a ‘not stated’ value.