BACKGROUND

Maternity and birth statistics: quality report

This report details how data is processed and highlights the strengths and limitations of the datasets used in the production of these statistics.

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Contents

What are these statistics?

The intention of the maternity and births statistical release is to provide statistics on mothers and babies, throughout the maternity and birth process. The release supports the Welsh Government maternity vision: **Maternity Care in Wales, A Five Year Vision for the Future (2019-2024)**, published in July 2019.

A number of statistics and analyses are produced on key areas including:

- how far into pregnancy a woman receives her initial assessment (or booking appointment)
- how many mothers are smokers
- how many mothers are overweight
- the mode of onset of labour, whether pain relief was administered and the mode of birth including planned and emergency Caesarean sections
- number of live births in Wales
- low birthweight rates

In July 2022, **a new annual breastfeeding statistical release** was published. All breastfeeding analyses which was previously published in the maternity and births release will now be published in this new release.

Breastfeeding is important for the health and development of infants and their mothers and is linked to the prevention of major health inequalities. The provision of human milk is the most accessible and cost-effective activity available in public health which is known to promote infant bonding. It also reduces the risk of a range of infectious and non-communicable diseases, including ear infections, gastroenteritis, asthma, childhood obesity, diabetes type 2 and maternal breast and ovarian cancer. Moreover, it can reduce household costs for families if less formula feed is needed.

The breastfeeding statistical release provides data to support the **All Wales**

breastfeeding 5 year action plan as well as the Wellbeing of Future Generations act 2015 which states that every child in Wales should receive the best start in life.

Sources of data

These statistics are derived from two data sources: the Maternity Indicators dataset (MI ds) and the National Community Child Health Database (NCCHD). Both data sources are provided to the Welsh Government by Digital Health and Care Wales (DHCW).

The Maternity Indicators dataset was established in 2016. It combines records from a mother's initial assessment with a child's birth record 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 Maternity Indicators dataset allows us to analyse characteristics of the mother's pregnancy and birth process. The process for producing this data extract is complex 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, DHCW take the following validation 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, all other birth records are retained
- data from the initial assessment is merged with the birth record 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, all other initial assessment data are removed
- where the birth record could not be matched to an initial assessment record, the birth record is still retained and all initial assessment data will be missing
- records where the number of days between the initial assessment and date of birth is 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

This complex process results in many records being removed from the dataset, therefore there are limitations in the use of statistics produced from the Maternity Indicators dataset.

The National Community Child Health Database was established in 2004 and consists of anonymised records for all children born, resident or treated in Wales and born after 1987. The database brings together data from local Community Child Health System databases which are held by local health boards (LHBs) and its main function is to provide an online record of a child's health and care from birth to leaving school age. The statistics used in this release are based on the data recorded at birth and shortly after birth.

Local Child Health Systems change over time to meet changing requirements; the latest and fourth version is known as the Children and Young Persons Integrated System (CYPrIS), and is being rolled out to all health boards during 2019. More information on its features is available on the **DHCW website**.

Full details of every data item available on both the Maternity Indicators dataset and National Community Child Health Database are available through the **NHS Wales Data Dictionary**.

Coverage

Data from the Maternity Indicators dataset only includes initial assessment data where the initial assessment and birth both occurred in the same health board, in Wales only.

Data should include all hospital births and some home births; however due to the way data is recorded, we are unable to distinguish between home and hospital births in some health boards. It does not include any births for Welsh resident mothers who gave birth in England or in any other country outside of Wales.

Data 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. This ensures data throughout a single pregnancy is recorded in the same year.

The National Community Child Health Database includes records of all children born in, resident in or receiving services in their relevant local health boards. This means the database contains some information for some children not currently residing in Wales; however, unless otherwise stated, all statistics produced from data sourced from this database is filtered to only include those children born in Wales. It also means that data is available for Welsh resident mothers who gave birth in England.

Data on breastfeeding at birth, 10 days, 6 weeks and 6 months refers to the time period in which the activity occurred, rather than when the child was born.

The National Community Child Health Database records both live and stillbirths, however the majority of analysis in the statistical release refers only to live births.

Analysing data from the National Community Child Health Database provides additional information on new-born children which is not available through the **Office for National Statistics**' (ONS) official measure on the number of births. Data from both sources is very closely aligned, but the Office for National Statistics' measures allow for more accurate comparisons between UK countries.

Published statistics on maternity and births in Wales

Maternity and birth statistics were first published as a single statistical release in October 2019 with new data referring to calendar year 2018. Previously these statistics were published in two separate statistical releases.

Registered births and **infant mortality** statistics are routinely produced by the Office for National Statistics and should be used as the main source for the number of births in Wales.

A number of other statistics are published using data sourced from the National Community Child Health Database:

- annual statistical release and quarterly StatsWales updates on the **Healthy Child Wales Programme**
- quarterly statistics on **breastfeeding**
- annual statistics on **immunisations**

The **National Maternity and Perinatal Audit (NMPA) publish reports** on topics such as neonatal mortality and breastfeeding in neonatal units which includes data for Wales.

Birth data from National Community Child Health Database is also published on

[**Health Maps Wales**](#).

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
- local health boards
- the public
- the research community
- students, academics and universities
- Public Health Wales and other NHS organisations
- voluntary birth organisations

If you are a user and do not feel the above list adequately covers you, or if you would like to be added to our circulation list, please let us know by e-mailing **stats.healthinfo@gov.wales**.

Strengths and limitations of the data

Strengths: in general for both data sources

- Data collected is used operationally by health boards so there is no additional burden on data suppliers and there are not any survey sampling issues.
- There are a wide range of data items available, allowing for a broad overview of maternity and birth statistics for mothers receiving services in Wales.
- Data is collected on a broadly consistent basis across Wales, though there are some differences in health board systems and methods of recording data.
- The key statistics from both sources largely meet the needs of users and support Welsh Government in making evidence based polices. The majority of data is available through these sources to monitor key performance indicators which the Welsh Government sets for local health boards.
- Statistics are published regularly and as timely as possible, with additional tables published on StatsWales.
- The number of births recorded in hospitals is very closely aligned between both the Maternity Indicators dataset and National Community Child Health Database.

Strengths: maternity indicators dataset

- The merging of the initial assessment and birth records allow us to analyse data across the whole maternity and birth process. It allows for monitoring areas of interest such as smoking during pregnancy and bespoke analysis can be performed such as analysing birth outcomes when the mother is overweight.

- The data is an administrative source which has a reasonable level of completeness across most data items, across all health boards (completeness tables shown at **Table 2**).

Strengths: National Community Child Health Database

- The dataset has long been established, is processed efficiently by DHCW, and aligns very closely with ONS' measure on the number of births in Wales.
- Data allows for more detailed analysis of birth in Wales than are provided by the ONS births measures.
- The data is an administrative source which has a high level of completeness across most data items, across all health boards (completeness tables shown at **Table 3**).

Limitations: in general for both data sources

- The StatsWales information is intended for a more informed audience, without full explanatory notes.
- As data is typically inputted into the computer system manually in the health boards, there is a risk of human processing errors.
- The Maternity Indicators dataset does not record information on births which occur outside of country to Welsh resident mothers, but the National Community Child Health Database does. The number of home births recorded in the Maternity Indicators dataset is lower than the number recorded in the National Community Child Health Database. The differences in these two recording practices largely explain the differences in the number of births in each dataset.

Limitations: maternity indicators dataset

The Maternity Indicators dataset is a complex dataset, which is subject to extensive validation processes. There are a number of limitations in the statistics produced from this data source and as a result, all statistics from this source are classed as **experimental statistics**. Some of the limitations include:

- Initial assessment data is only included for records where the initial assessment and birth took place in the same health board. This creates two significant limitations:
  - Initial assessment records where the initial assessment takes place in a different health board to the birth are removed in the merging process and are not accounted for in any of the analysis.
  - If a mother has an initial assessment in one health board, and gives birth in a different health board but her information from the initial assessment is not transferred, a second 'initial assessment' may occur in the health board where the birth occurs. This means that this record will be included in the Maternity Indicators dataset, but the information for the initial assessment will come from the second assessment, and is likely to be significantly different for a number of data items, like BMI and gestational age at initial assessment. These records are retained as we are unable to confidently differentiate between these cases and mothers who genuinely have their first assessment close to birth.
- While data completeness is relatively good for most data items, it can be mixed for some data items, particularly when assessing coverage at health board level. This means changes over time should always be assessed with their data completeness in all years, as any perceived changes may be due to changes in data coverage rather than actual changes in the trend.
- Data validation rules for health boards are not entirely consistent; some data items contain values which are not valid according to the data dictionary.
- Some health boards record data items inconsistently; for example, some

health boards record 'no previous Caesareans' as 0 while others record it as 99.

- Values for some raw data items are obviously incorrect; for example, thousands of records have unrealistic values for mother's heights and weights which need to be removed from the published statistics. This raises questions around the general reliability of data recording across all data items.
- The analysis on smoking during pregnancy is limited because CO (Carbon Monoxide) testing is not available for all assessments across all health boards, so some data is included on the mother self-reporting their smoking status. In addition, CO monitoring will not capture mothers who use e-cigarettes, but some health board may record a mother self-reporting as an e-cigarette user as a smoker, so there may be inconsistencies in the recording of this data item.
- Births outside of hospitals (usually at home) are sometimes, but not always recorded in the database,and the way the data is recorded does not always allow us to identify in which setting the birth occurred.
- The **Maternity Care in Wales strategy** requires the monitoring of a range of data fields which are not currently included in the Maternity Indicators dataset.

Limitations: National Community Child Health Database

There are few limitations in using data from the National Community Child Health Database, though some potential limitations include:

- While the number of births closely aligns to the ONS measure, there are sometimes very small differences so the two sources are not always 100% coherent.
- While data completeness for most data items is very high, they might not always be 100% complete so there may be a small amount of missing data.
- Data on ethnic group is much less complete than most other data items in

the database.

- Data from the database is not currently linked to the Maternity Indicators dataset; if it was then there would be potential to extend analysis to assess the relationship between events which happen in pregnancy with outcomes for the child after birth and in their early years. For example, analysis could be produced on the relationship between the timing of the initial assessment and breastfeeding rates.
- Other statistical releases using data from the database are not currently linked to the maternity and births statistical release, these include statistics on the Healthy Child Wales Programme.

Definitions

Both Maternity Indicators dataset and National Community Child Health Database data items are listed in the **NHS Wales Data Dictionary**. The data dictionary also defines how ethnic groups are classified.

Data processing cycle

The broad data processing steps for the Maternity Indicators dataset is as follows:

- initial assessment and birth data are recorded by health boards on their own systems
- Digital Health and Care Wales (DHCW) extract data from health boards, once a month
- DHCW inform health boards that data extracted in April, will be used in Official Statistics for the previous calendar year, allowing health boards time to ensure their data is as complete as possible by this date

- DHCW stores the data on temporary databases before merging the two datasets
- records are merged by using a combination of the mother's NHS Number and the date of initial assessment from both temporary datasets
- DHCW perform additional **validation** on the data and then send to the Welsh Government a pseudonymised data extract in May

A similar data processing cycle exists for the National Community Child Health Database:

- health boards enter data onto their own child health systems
- DHCW extract data every quarter and store in their own database
- a grouping process is then applied to the database using valid anonymised NHS numbers so that records relating to the same child can be identified
- the National Community Child Health Database is built from this data with the aim of obtaining maximum record completeness
- the extract taken in April is used for births occurring in the previous calendar year and a pseudonymised version is sent to Welsh Government for use in this statistical release

Once data is received by Welsh Government, a range of data validation checks are performed, these include:

- identifying duplicate records
- deriving the number of babies born from each pregnancy
- identifying incorrect data for mother heights and weights and recalculating BMI
- recoding invalid data values to the value for 'not stated'
- recoding blank fields to the value for 'not stated'
- standard sense checks against previous years' data
- checking that data items for certain fields are consistent between records where there was a multiple births (i.e. twins or triplets)

Disclosure and confidentiality

The data which Welsh Government receives for both datasets contains individual but anonymised records. This means that no person (mother or baby) are identifiable in either dataset.

DHCW take several steps to protect personal information before sharing it, and Welsh Government take disclosure control steps before publishing data, these include:

- creating pseudoynmised ID's for mothers and babies which are unique identifiers, based on NHS numbers, which cannot be traced back to the actual NHS number by anyone who sees the Welsh Government data extract
- names and dates of birth are not included in either dataset
- Welsh Government publishes statistics at aggregated levels
- any counts under 3 for any specific data item are supressed before publication

Data is submitted on Excel spreadsheets via Afon, the Welsh Government secure web data transfer system or secure email. Data is stored and analysed using an Access databases.

Welsh Government statistics are published in line with our **statement on confidentiality and data access** which is informed by the trustworthiness pillar contained in the **Code of Practice for Statistics**.

Quality information

Data quality of specific data items

Gestational age at initial assessment

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. It is possible that a mother could have an initial assessment in one health board, early in the pregnancy, but then if she gives birth in another health board for any reason (for example, unexpected complications, or present in a different health board area at the time) she will have another initial assessment recorded at the second health board where she gives birth. This may explain the small peak around 39 and 40 weeks in Chart 1.

The percentage of women who received their initial assessment by 10 completed weeks of pregnancy is based on all records less records with a 'not stated' value for gestational age at initial assessment. 'Not stated' also includes records where the gestations was stated as 0 weeks. The number records removed from the calculation for this reason in each year are: 1,703 in 2016, 709 in 2017, 652 in 2018, 721 in 2019, 722 in 2020, 669 in 2021, 821 in 2022.

Mental health conditions reported at initial assessment

The Wales-level percentage for pregnant women reporting a mental health condition at initial assessment excludes data from Betsi Cadwaladr and Cwm Taf/Cwm Taf Morgannwg because of their low reliability for all six years. While 99% of records had valid data entered in both health boards, the large majority

were recorded as having no mental health condition which is unlikely to reflect the actual position in these health boards.

All other health boards have valid data for the mental health data item in at least 88% of records in each year, apart from Cardiff and Vale in 2016 (56% completeness).

The percentages for the number of pregnant women reporting a mental health condition at initial assessment are based on all records less records with a 'not stated' value for mental health condition. The number of records removed from the calculation for this reason in each year are: 3,463 in 2016, 1,244 in 2017, 968 in 2018, 687 in 2019, 793 in 2020, 515 in 2021, 696 in 2022.

BMI at initial assessment

The Wales-level percentage for pregnant women with BMI of 30 or greater are based on all records less records with a 'not stated' or invalid value. Records where BMI, height or weight are unrealistic values are classed as invalid, for example where BMI is less than 10 or greater than 100; where the pregnant woman's weight is less than 30kg or more than 250kg; and where the pregnant woman's height was less than 120cm or greater than 200cm. The number of records excluded for these reasons in each year are: 1,773 in 2016, 1,078 in 2017, 949 in 2018, 1,159 in 2019, 728 in 2020, 684 in 2021, 589 in 2022.

The calculation also only includes women who had their initial assessment at 14 completed weeks of pregnancy or earlier. This is to reduce unfair comparisons where the BMI calculation is affected by baby growth where the initial assessment happened after 15 weeks. Between 11% to 15% of all pregnancies have been excluded for this reason in each year.

All health boards have reported 90% or more valid data in all years for height and weight data items More than 90% of records had valid data for both height

and weight data items, across all health boards, in most yearsapart from. The exceptions are: Cwm Taf in 2016 (77%) and in 2019 (88%); and Betsi Cadwaladr in 2019 (89%).

Weight gained during pregnancy

To calculate the amount of weighed gained, each mother needs a valid weight recorded at initial assessment or between 36-38 week or at birth. There is a relatively high proportion of missing data for mothers' weight at birth which limits the reliability of the weight gain data.

In 2021, Hywel Dda health board did not provide any data for mother's weight at birth, and Swansea Bay had a higher than usual amount of missing data. As a result, the Wales data excludes both of these health boards. The percentage of records with valid data for this calculation for each year are: 2021 (61%); 2020 (73%); 2019 (80%); 2018 (75%); 2017 (70%); 2016 (55%). As a result of the level of missing data, caution is advised when using this statistic.

Smoking at initial assessment

While there is a high percentage of valid data for smoking status at initial assessment, 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 self-reporting accurate information. CO monitoring has largely been suspended since the COVID-19 pandemic began, so data for 2020 and 2021 is mainly self-reported.

E-Cigarette use should 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 incorrectly recorded as a smoker. Likewise, some mothers who do smoke may self-report as a non-smoker and be

incorrectly recorded as a non-smoker.

The percentage of pregnant women recorded as being a smoker at initial assessment are based on all records where valid data for this data item are recorded. The number of records with no stated smoking status at initial assessment in year was: 997 in 2016, 1,037 in 2017, 924 in 2018, 549 in 2019, 849 in 2020, 615 in 2021, 568 in 2022.

Similarly, the analysis by age requires valid data for smoking status at initial assessment as well as age. The number of records with either of these data items missing was: 997 in 2016, 1,037 in 2017, 924 in 2018, 549 in 2019, 849 in 2020, 615 in 2021, 568 in 2022.

Further, the analysis by ethnic group requires valid data for smoking status at initial assessment as well as ethnic group. The number of records with either of these data items missing was: 13,020 in 2016, 7,545 in 2017, 6,138 in 2018, 7,661 in 2019, 7,726 in 2020, 6,143 in 2021, 6,297 in 2022.

CO monitoring has largely stopped since the COVID-19 pandemic which may affect the comparability for data collected before and after 2020. Of those who were reported as smokers, the percent who were recorded because of CO monitoring in each year was: 25% in 2016, 28% in 2017, 29% in 2018, 31% in 2019, 26% in 2020, 1% in 2021, 2% in 2022.

Smoking at birth

Smoking at birth statistics are limited for the same reasons as smoking at initial assessment; however, there has also been an increase in missing and invalid data recorded for smoking at birth in recent years. The number of records with no stated smoking status at birth in each year was: 888 in 2016, 859 in 2017, 519 in 2018, 805 in 2019, 3,717 in 2020, 4,836 in 2021, 5,148 in 2022.

Similarly, the analysis by age requires valid data for smoking status at birth as well as age. The number of records with either of these data items missing was: 888 in 2016, 859 in 2017, 519 in 2018, 805 in 2019, 3,717 in 2020, 4,836 in 2021, 5,148 in 2022.

Further, the analysis by ethnic group requires valid data for smoking status at birth as well as ethnic group. The number of records with either of these data items missing was: 13,044 in 2016, 7,595 in 2017, 6,084 in 2018, 7,942 in 2019, 8,998 in 2020, 8,379 in 2021, 8,708 in 2022.

In 2022, Hywel Dda did not provide any smoking at birth data and Cwm Taf Morgannwg had an unusually high percentage of missing data.

Stopped smoking during pregnancy

This analysis is based on women who had valid smoking data at both initial assessment and birth. As smoking status is recorded at two points in time only, the data will not show if mothers were smoking throughout the duration of their pregnancy, or how frequently they smoked. For the purpose of this release 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.

The denominator for the percentage calculation is the total records less records with a 'not stated' value at either initial assessment, birth or both. The number of records with missing data has varied throughout the time series and has increased in recent years. The number of missing records in each year were: 1,551 in 2016, 1,622 in 2017, 1,304 in 2018,1,256 in 2019 and 4,196 in 2020, 5,089 in 2021, 5,332 in 2022.

Onset of labour

Data was recorded in the Maternity Indicators dataset for every health board; however, in Hywel Dda and Aneurin Bevan health boards, labour onset has not been recorded as 'caesarean' when an elective caesarean section birth occurred in all years of data. As a result of this data quality issue, these health boards have been excluded from the analysis for each year. For 2022, the statistics presented at Wales-level are based on the 19,042 deliveries which took place at the remaining five health boards.

The number of records which had missing data for the onset of labour data item was: 33 in 2016, 52 in 2017, 136 in 2018, 218 in 2019, 242 in 2020, 282 in 2021, 639 in 2022.

Pain relief

The percentage of records with valid data for epidurals is mixed across health boards and years, and in 2020, 83% of records had valid data at all Wales level. 4 out of 7 health boards had valid data for 99% or more of their records. Aneurin Bevan health board had the lowest percentage of valid data (35%).

At the Wales level, the number of records with missing data for pain relief was: 4,605 in 2016, 4,739 in 2017, 4,407 in 2018, 4,365 in 2019, 4,602 in 2020, 4,617 in 2021, 5,077 in 2022.

Broad data quality

Statistics published by Welsh Government adhere to the **Statistical Quality Management Strategy** which supplements the Quality pillar of the **Code of Practice for Statistics** and the **European Statistical System** principles of

quality for statistical outputs. This statistical release aims to meet these quality principles in the following ways.

Principle 11: Relevance

The statistics provide an overview of maternity services and birth characteristics in Wales. The statistics support the Welsh Government maternity vision: **Maternity Care in Wales, A Five Year Vision for the Future (2019-2024)**.

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 and encourage users of the statistics to contact us to let us know how they use the data.

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.

Principle 12: Accuracy and Reliability

The Maternity Indicators dataset is recently established and data quality is mixed. Welsh Government and DHCW 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.

A comparison of the total number of records per year is shown in **Table 1**.

Table 2 and **Table 3** show how complete individual data items are across both sources. If a data item has a value entered which is equivalent to 'not stated' this is considered incomplete data in all years of the Maternity Indicators dataset but only in 2021 onwards in the National Community Child Health Database. In years prior to this, a 'not stated' value was considered valid. Missing or blank data is considered incomplete for all years in both datasets.

Note that 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.

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.

The charts and tables in the statistics may include categories for not stated data. Calculated percentages exclude not stated values from the denominator unless otherwise stated. The quantity of missing data for each data item is referred to throughout the text.

Both Maternity Indicator dataset and National Community Child Health Database are live databases, meaning health boards can amend data for any period. For the statistics in this release, DHCW take data extracts from a single point in time, for the latest calendar year. This means that if data extracts are taken for previous time periods, they may differ to the data which is published as it may have been revised by health boards. Welsh Government will not make revisions to historical data unless errors are discovered. In the case of incorrect data

being published, revisions would be made and users informed in conjunction with our **Revisions, errors and postponements** policy.

Note that in 2019, new data from the Maternity Indicators dataset was published for calendar years 2016, 2017 and 2018. Previous maternity statistics publications were experimental statistics, based on financial years. Publishing on a calendar year basis required new Maternity Indicators data extracts to be produced by DHCW for the full time series, therefore data and trends published in previous publications may have changed.

Principle 13: Timeless and Punctuality

Data is published as soon as is practicable.

The data provider (DHCW) extracted both datasets in April 2019, for the reference year 2018. 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 2018 is currently published in the autumn 2019; 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.

Principle 14: 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.

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 is available.

Scotland: **Births in Scottish Hospitals**

Northern Ireland: **Birth Statistics**

England: **NHS Maternity Statistics**

Principle 15: 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 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.

The statistical release in 2019 combines two previous statistical releases on maternity and birth statistics and aims 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.

National Statistics

The United Kingdom Statistics Authority designates statistics as **National Statistics** in accordance with the Statistics and Registration Service Act 2007 and compliance with the Code of Practice for Statistics. The statistics in this release are Official Statistics, but as they have not been through the badging process, they are not National Statistics. All statistics which are produced from the Maternity Indicators dataset are also classed as **experimental statistics**.

Dissemination

Given the strengths and limitations listed above, data from both the Maternity Indicators dataset and National Community Child Health Database are of sufficient quality to justify publication. An extensive statistical release is published with high level summaries and charts, with interactive data tables are published on **StatsWales**.

Evaluation

We always welcome feedback on any of our statistics. If you would like to make

any comments, please e-mail us at **stats.healthinfo@gov.wales**.