

Article

# Births in England and Wales explained: 2020

An article to explain the impact the coronavirus (COVID-19) pandemic has had on 2020 births data and the differences between birth registration and birth notification data.

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# 1 . Other birth outputs in this release

Other commentary from the latest births data can be found on the following pages:

- [Births in England and Wales: 2020](#)
- [Births by parents' country of birth, England and Wales: 2020](#)

## 2 . Main points

- Birth registration services have been disrupted by the coronavirus pandemic and this has impacted our usual births data release schedule.
- There are small differences between the published provisional data and our usual annual births data but the main messages remain unchanged with the total number of births continuing the decrease that we have seen in recent years.
- The 2020 birth registrations data are likely to be a small underestimate; the majority of the currently missing or late registrations will be included in our 2021 births release.
- Birth notifications are a good alternative source of births data and are suitable for use alone in some circumstances but used in combination with birth registration data provide a more rounded, detailed, and robust time series.

## 3 . Births data and birth registration delays

Our [annual first release of birth statistics](#) is derived from information recorded when live births and stillbirths are registered as part of civil registration, a legal requirement; these data usually represent the most complete data source available. However, in 2020 birth registrations in England and Wales were delayed because of the coronavirus (COVID-19) pandemic.

### Delays in birth registrations

Birth registration in England and Wales was temporarily suspended in March 2020. From June 2020 registrations resumed where it was safe to do so. The reopening of services varied across England and Wales because of the differences in local and national lockdown restrictions, the ability of services to comply with COVID-19 safety measures (such as social distancing in registration premises) and to fully staff offices appropriately. In addition, the local registration services saw an increase in death registrations, which were prioritised over birth registrations to ensure that the bereaved were impacted as little as possible by the pressure placed upon the registration service. This also ensured that the most timely deaths data were available to support the government response to the pandemic.

## Impact of birth registration delays

The Office for National Statistics (ONS) and General Register Office (GRO) have been working closely together to monitor the delays in birth registrations.

In normal circumstances, births should be registered within 42 days, and over 95% are usually registered in that timeframe. The proportion of births registered within 42 days dropped to just 58% in 2020. The GRO is following up these cases and verifying registrations as part of its usual validation process, and any late registrations will be included in the 2021 births data release in line with our normal practice. A birth certificate is usually required to claim certain child tax and benefits. During the pandemic the rules on this requirement have been relaxed to enable those who need to claim benefits to still do so even if they have been unable to register the birth.

In response to the known delays, questions on the possible impact of the pandemic on births, and particularly the [importance of publishing timely stillbirth data during the pandemic](#), we published [new provisional births data \(based on NHS birth notifications\) in December 2020 for births occurring between January and September 2020](#).

Our annual data extract usually only includes births registered before 25 February of the following year (as well as some late registration from the previous year). However, as of 1 March 2021, birth registrations for 2020 were well below the number normally expected. Following consultation with GRO and our main stakeholders, the ONS decided to delay taking the extract of births and to monitor the delayed registrations with the aim of releasing as complete a dataset as possible, balancing timeliness and completeness.

To meet user needs and questions on stillbirths during the pandemic in as timely a manner as possible, we also released a second set of [provisional births data in June 2021 for births occurring in 2020 and between January and March 2021](#) (again based on NHS birth notifications).

In parallel, we continued to monitor the completeness of the registrations, and our annual 2020 data release includes births registered by 12 August 2021 in the dataset. This cut-off date for inclusion of registrations was five and a half months later than usual. [The 2020 births data was then released on 14 October 2021](#).

It is our normal practice to include late registrations in the following data year. The 2020 dataset includes births occurring in 2020 and registered before the cut-off date (12 August 2021) and some late registrations from 2019 (194). Late registrations (after 12 August 2021) for births occurring in 2020 will be included in next years' release of 2021 births and we expect that the number of late registrations will be slightly higher than normal. We are confident that the small number of late registrations each year does not impact on the trends and patterns observed. We will review the data in 2021 to confirm this is still the case.

Birth registration data enables the Office for National Statistics (ONS) to deliver regular birth statistics and other outputs. It is also used by a wide range of internal and external researchers and the NHS (shared using appropriate legal gateways). The ONS releases include:

- [Birth summary tables](#), [Births by parents' country of birth](#), [Baby names](#) and [Birth characteristics](#)
- [Quarterly conceptions](#) and [annual conceptions](#)
- [Child and infant mortality statistics](#)
- [Fertility statistics](#)
- [Population estimates](#) and [projections](#)
- [Local area migration indicators](#)

## Sources of births data

As well as the annual first release of births statistics (based on registrations) we also link birth registrations to their corresponding NHS birth notifications to enable analysis of further [birth characteristics](#) such as gestational age and ethnicity of the baby. The birth notification is a document completed by the doctor or midwife present at the birth and these data were not impacted by the coronavirus pandemic in the same way as registrations. For more information on the NHS birth notification service see [NHS Digital](#).

## The difference between birth notifications and registrations

Though the NHS birth notification data are not directly comparable with birth registration data, comparisons suggested the two data sources are very similar.

As outlined in our [provisional release](#), when NHS birth notification data are compared with birth registration data, we find that differences are small, especially at the national level and for the most recent years of data. We were confident that the provisional figures for 2020 were of sufficient quality to provide a more timely indicator than would be available from the birth registration data.

In addition, our regular annual linkage between birth registrations and birth notifications saw 99.96% of birth registrations linked to a birth notification in 2019. Our [User guide to birth statistics](#) provides more information on the linkage.

There are some differences between birth registration and birth notifications and the data they provide, which could also have implications for the differences and quality of specific data items.

### Birth registrations

- Population: births registered within a defined period\*
- Collection method: a legal document created through the formal registration of a birth at a registry office by a child's parent(s) or informant
- Coverage: births registered in England and Wales
- Reporting differences:
  - a stillbirth is a baby born after 24 or more weeks completed gestation and which did not, at any time, breathe or show signs of life
  - Personal details provided directly by parent(s) or informant

### Birth notifications

- Population: births occurring and reported to NHS in a calendar year
- Collection method: a document completed by the doctor or midwife present at the birth
- Coverage: births occurring in England and Wales
- Reporting differences:
  - stillbirth notifications are sometimes received where the gestational age is recorded as less than 24 weeks
  - some personal details are provided through NHS systems not directly by the informant

\*Registrations are usually cut-off on 25 February the year following the data reference year and late registrations after the cut-off are included in the next reference year. Late registrations from previous years are not included. For the 2020 data reference year the cut off was extended to 12 August 2021.

## 4 . Birth registrations and notifications in 2020

There are small differences in the [2020 provisional births data](#) released on 24 June 2021, which is based on birth notifications, and the [birth registrations based 2020 data](#) released today (14 October 2021) (Table 1). The difference can be accounted for by the different data sources and the delay in births registrations data as outlined in [Section 2](#).

Table 2: Birth registrations and birth notifications by select measures, England and Wales, 2020

	<b>Birth registrations</b>	<b>Birth notifications</b>	<b>Difference</b>	<b>Percentage difference</b>
<b>Live births (numbers)</b>	613,936	615,557	-1,621	-0.3%
<b>Stillbirths (numbers)</b>	2,371	2,429	-58	-2.4%
<b>Total births (numbers)</b>	616,307	617,986	-1,679	-0.3%
<b>Total fertility rate (number of children per woman)</b>	1.58	1.58	0	0.0%
<b>Stillbirth rate (per 1,000)</b>	3.8	3.9	-0.1	-2.6%

Source: Office for National Statistics and NHS Digital

In 2020, birth registrations data saw 1,621 fewer live births recorded than the birth notifications data and 58 fewer stillbirths. The larger percentage difference in the still births figures is likely to be because of definitional differences between the data sources, and the difference in the data is consistent with previous years. The delays seen for registering live births were not seen for stillbirths as the provisions contained within the [Coronavirus Act](#) (telephone registrations were facilitated to enable the death management system to function as efficiently as possible during the height of the pandemic) were extended to stillbirths as well as deaths. These provisions are still in place and are subject to review on a regular basis.

The differences in the data between the sources does not change the main messages - a story of continued decreases and record lows with the total number of births continuing the fall that we have seen in recent years.

The difference in the births data do not impact on recently reported changes to the overall net natural change seen for England and Wales and for the UK as a whole and discussed in [Impact of births and deaths on UK population change: 2020](#).

## Births notifications data that were not linked to a birth registration

In a normal year we usually see more live birth registrations than live birth notifications, so the 2020 birth registration data are likely to be a small underestimate. The majority of these missing or late registrations will be included in our 2021 births release, however, a minority may never be registered.

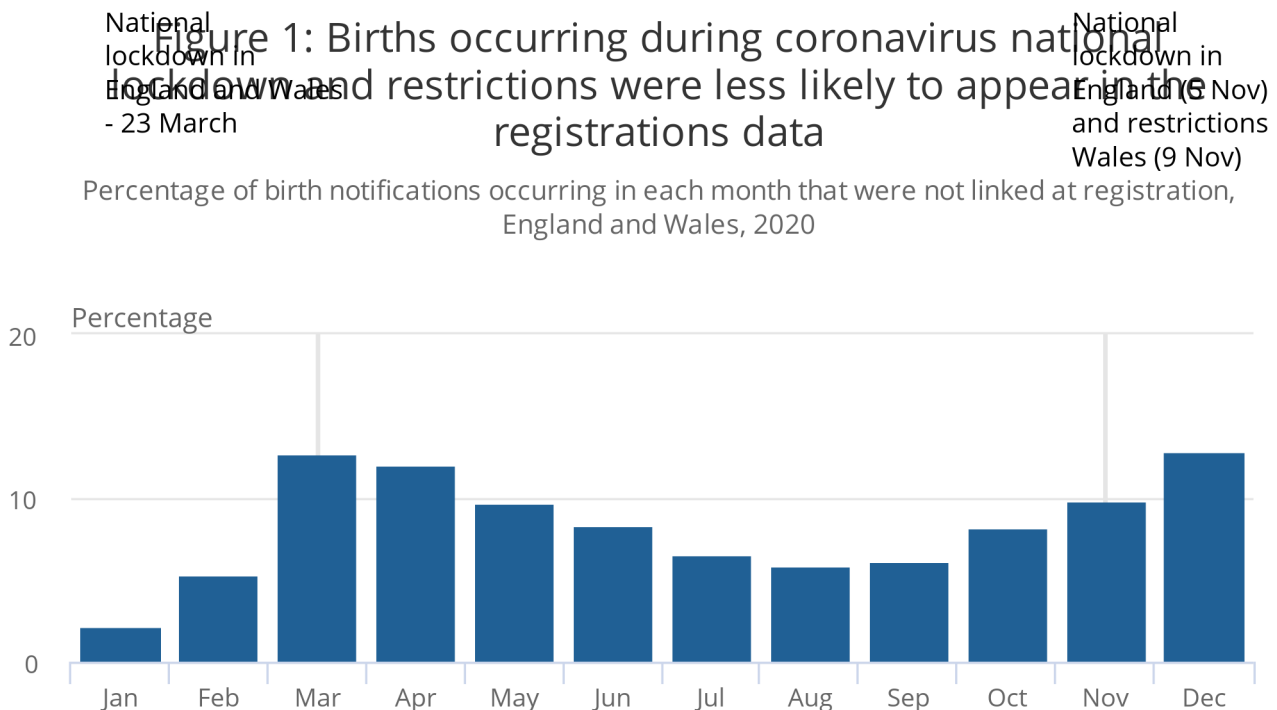
We looked in more detail at the birth notifications that were not manually linked during the registration process. This could be because limited, incorrect, or incomplete information had been provided on the notification. We always see a small difference in this number as some births won't be registered or receive a notification for legitimate reasons. For example, for babies who sadly die, the birth may not always be registered.

We looked at these births to assess if there was likely to be any bias in the missing registrations by comparing the notifications data that we were able to link at registration to those that we could not link at registration.

We found that births occurring from March to June and October to December 2020 were less likely to appear in the registrations data. These time periods appear to coincide with periods of national lockdown and restrictions (Figure 1).

**Figure 1: Births occurring during coronavirus national lockdown and restrictions were less likely to appear in the registrations data**

Percentage of birth notifications occurring in each month that were not linked at registration, England and Wales, 2020



Source: Office for National Statistics and NHS Digital

Separately we looked at demographic and geographical differences and found that:

- there were similar distributions for the sex of the baby and the age of the mother in both the linked registrations data and unlinked notifications
- there were slightly bigger differences for London, North West, and Yorkshire and The Humber with more notifications not linked to a registration seen in these regions
- fewer than 0.5% of notifications remained unlinked across all English regions and Wales

## An estimate of birth registrations in a normal year

As discussed, the 2020 birth registrations data are likely to be an underestimate. We decided not to make any adjustments to the official 2020 registrations data. However, we are aware there may be interest in understanding how many registrations could be missing compared with the normal trend.

If we compare the notification and registration data for each of the three years 2017, 2018 and 2019 we see that there is a difference between the figures of between just 0.04% and 0.05%. Taking the average of the difference for the three years and applying this as an uplift to the 2020 birth notification data gives us a crude estimate. This estimate suggests that roughly an additional 2,300 live births could be applied to the 2020 birth registrations, bringing the estimate of live births to around 616,200, slightly higher than the provisional data.

The possible underestimate of live births in 2020 should not change the pattern and trends reported in either our provisional notifications data or our annual registrations data.

We also compared notifications and registrations for stillbirths but did not find a big difference. We believe the registration numbers of stillbirths to be our best estimate.

## Which data to use, and when

We recommend that in most cases you should continue to use our annual births registrations data and our regular publications as the more accurate and detailed source of births data. These data are comparable over a long time series. You should be aware of the caveats with the 2020 data year but, assuming current trends continue, any minor differences in the 2020 and 2021 births data will not be noticeable in the series.

If you require national numbers or rates for the most recent year you can use the provisional data based on birth notifications. We do not recommend that you use detailed notifications data, for example by local authority, particularly when reviewing trends over time and data prior to 2017 where the difference between registration and notifications are more pronounced.

If you require regional or local births data, we recommend that you use birth registration data and review the local area of interest. Be aware that some areas may have a larger difference than others.

Detailed data such as on gestational age, birthweight, father's age, marital status and ethnicity of the baby will be published as part of our usual [Birth characteristics](#) publication. In the meantime, limited data are available in our [provisional release](#) on gestational age, birthweight, place of birth and date of occurrence.

## 5 . Next steps

We will continue to monitor the effects the pandemic has had on births in 2020 throughout the year in our normal birth releases. These releases will be based on this same birth registration data supplemented with the extra information available from notifications.

We will continue to monitor birth registrations, the ongoing effects of the pandemic on 2021 births and late 2020 registrations.

As part of the [Office for National Statistics' \(ONS\) strategy](#) to use data for the public good we will continue to make use of all administrative data that can inform and improve our birth statistics. We will continue to use and investigate the quality of birth notification data and the differences between registration data, exploiting the benefits of each source.

## 6 . Glossary

### Live birth

A baby showing signs of life at birth.

### Stillbirth

A stillbirth is a baby born after 24 or more weeks completed gestation and which did not, at any time, breathe or show signs of life.

### Stillbirth rate

The stillbirth rate is defined as the number of stillbirths per 1,000 live births and stillbirths.

### Total fertility rate (TFR)

TFR is the average number of live children that a group of women would have if they experienced the age-specific fertility rates for the calendar year in question throughout their childbearing lifespan. It is a better measure of trends than the number of livebirths, since it accounts for the size and age structure of the female population of childbearing age. The rate provides a timely measure of fertility levels and can be affected by changes in the timing of childbearing, [completed family size](#) and the population structure.

A [more complete glossary](#) is available from our User guide to birth statistics.

## 7 . Related links

### [Births in England and Wales: 2020](#)

Bulletin | Released 14 October 2021

Live births, stillbirths and the intensity of childbearing, measured by the total fertility rate.

### [Births by parents' country of birth, England and Wales: 2020](#)

Bulletin | Released 14 October 2021

Annual statistics on live births including countries of birth for non-UK-born mothers and fathers.

### [Provisional births in England and Wales: 2020 and Quarter 1 \(Jan to Mar\) 2021](#)

Article | Released 24 June 2021

Provisional analysis of births occurring between January 2020 and March 2021 in England and Wales using NHS birth notifications to explore possible effects of the coronavirus (COVID-19) pandemic on live births and stillbirths.

### [Baby names in England and Wales: 2019](#)

Bulletin | Released 26 August 2020

Most popular first names for baby boys and girls in 2018 using birth registration data.

### [Birth characteristics in England and Wales: 2019](#)

Bulletin | Released 16 November 2020

Annual live births by sex, ethnicity and month, maternities by place of birth and with multiple births, and stillbirths by age of parents and calendar quarter.

### [User guide to birth statistics](#)

Article | Released 14 October 2021

Supporting information for birth statistics, which present figures on births that occur and are then registered in England and Wales. Figures are based on information collected at birth registration.



