

Statistical bulletin

Child and infant mortality in England and Wales: 2020

Stillbirths, infant and childhood deaths occurring annually in England and Wales, and associated risk factors.



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Table of contents

- 1. Main points
- 2. Trends in child and infant mortality
- 3. Stillbirths and neonatal deaths in England
- 4. Neonatal and infant mortality risk factors
- 5. Child and infant mortality data
- 6. Glossary
- 7. Measuring the data
- 8. Strengths and limitations
- 9. Related links

1. Main points

- In 2020, 2,226 infant deaths (aged under one year) and 789 child deaths (aged 1 to 15 years) occurred in England and Wales; these are the lowest numbers of infant and child deaths since records began in 1980.
- In 2020, the infant mortality rate was 3.6 deaths per 1,000 live births in England and Wales; while this follows a general decline since 1980, the infant mortality rate has remained fairly stable since 2014.
- In 2020, the neonatal mortality rate (aged under 28 days) was 2.7 deaths per 1,000 live births in England and Wales; this rate has remained stable since 2016.
- In 2020, the main causes of death among children aged 28 days to 15 years continued to be congenital malformations, deformations and chromosomal abnormalities.
- In 2020, there were 11 deaths of children aged 28 days to 15 years where the underlying cause was "novel coronavirus (COVID-19)".

Delays in birth and death registrations because of the coronavirus pandemic have affected 2020 data, see <u>Section 7: Measuring the data</u>.

2. Trends in child and infant mortality

There were 789 child deaths (aged 1 to 15 years) in 2020 in England and Wales, the lowest on record. This is a rate of 7.0 deaths per 100,000 population of the same age and has steadily fallen from a rate of 33.0 child deaths per 100,000 population of the same age in 1981.

A total of 2,226 infant deaths (aged under one year) occurred in England and Wales in 2020, which equates to a rate of 3.6 deaths per 1,000 live births. The infant mortality rate has generally declined since 1980, but has remained fairly stable in recent years, with the 2020 rate the same as in 2014.

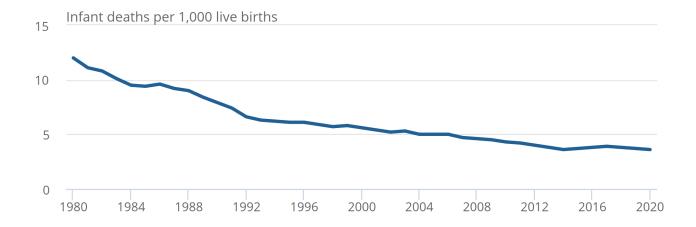
The overall decline in infant mortality rates since 1980 likely reflects general improvements in healthcare and more specific improvements in antenatal and neonatal care.

Figure 1: Overall decline in infant mortality rate since 1980

Infant mortality rate, England and Wales, 1980 to 2020

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Infant mortality rate, England and Wales, 1980 to 2020



Source: Office for National Statistics - Child and infant mortality in England and Wales: 2020

There were 117 infant deaths in 2020 in Wales, and an infant mortality rate of 4.1 deaths per 1,000 live births.

The West Midlands continued to have the highest infant mortality rate across all regions in England, with 5.3 deaths per 1,000 live births. The East and South West regions had the lowest infant mortality rate of 2.9 deaths per 1,000 live births.

Infant mortality rates within English regions and Wales are more variable than the rate for England and Wales combined. This is because of the smaller numbers of births and deaths recorded. This means that short-term changes are not as reliable at describing trends as the combined England and Wales rate.

3. Stillbirths and neonatal deaths in England

In the UK, health is a devolved matter. In England, there is an <u>ambition to halve the stillbirth rate and the neonatal</u> mortality rate by 2025, compared with 2010.

The stillbirth ambition is for the rate to decrease to 2.6 stillbirths per 1,000 births by 2025. The 2020 rate was 3.8 stillbirths per 1,000 births (Figure 2), unchanged since 2019. If the number of 2025 births were the same as in 2020, achieving the ambition would mean stillbirths decreasing by 704, to 1,527.

Prior to 2021, the ambition covered all neonatal deaths, and required the neonatal mortality rate to fall to 1.5 deaths per 1,000 live births by 2025. In 2021, the ambition was revised, as outlined in the <u>Safer maternity care progress report 2021</u>. The ambition was changed to 1.0 neonatal deaths per 1,000 live births for babies born at 24 weeks or over. In 2020, this rate continued the recent gradual decline, to 1.3 deaths per 1,000 live births. If 2025 live births were the same as in 2020, achieving the revised ambition would mean reducing neonatal deaths among babies born at 24 weeks and over by 152, to 581.

Figure 2: Progress towards stillbirth and neonatal death ambition since 2010

Stillbirths and neonatal mortality rates, England, 2010 to 2020

Download the data

.xlsx

In Wales the stillbirth rate was 4.4 per 1,000 births. The neonatal mortality rates were 2.9 per 1,000 live births for babies of all gestations, and 1.4 per 1,000 live births for babies born at 24 weeks and over.

4. Neonatal and infant mortality risk factors

Gestational age

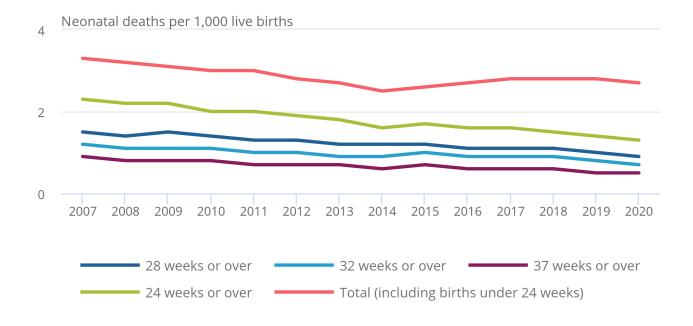
Gestational age is associated with neonatal mortality risk. In 2020, the slight decline in the overall neonatal mortality rate (Figure 3) corresponded with a <u>decrease in the proportion of births under 24 weeks gestation that were live births</u>.

Figure 3: Shorter gestational age associated with higher neonatal mortality

Neonatal mortality rates by gestational age, England and Wales, 2007 to 2020

Figure 3: Shorter gestational age associated with higher neonatal mortality

Neonatal mortality rates by gestational age, England and Wales, 2007 to 2020



Source: Office for National Statistics - Child and infant mortality in England and Wales: 2020

Cause of death

Congenital malformations, deformations and chromosomal abnormalities continued to be the leading cause of death among children aged 28 days to 15 years, followed by neoplasms. Immaturity-related conditions continue to account for approximately 50% of neonatal deaths in 2020, with congenital anomalies and antepartum infections together accounting for another 38%.

For children aged 28 days to 15 years, "novel coronavirus (COVID-19)" was the underlying cause of death of 11 children in 2020 and was mentioned on the death certificate of an additional two children. These deaths account for 1% of deaths of children in this age group that occurred in 2020. These figures differ to other mortality statistics on deaths due to and involving COVID-19, which are based on the number of deaths registered in a reference period, rather than when they occurred.

Birthweight

<u>Low birthweight</u> is associated with an increased risk of poor outcomes at birth.

For low birthweight babies, the infant mortality rate was 27.9 deaths per 1,000 live births in 2020, compared with normal birthweight babies where the rate was 0.8 deaths per 1,000 live births.

Ethnicity

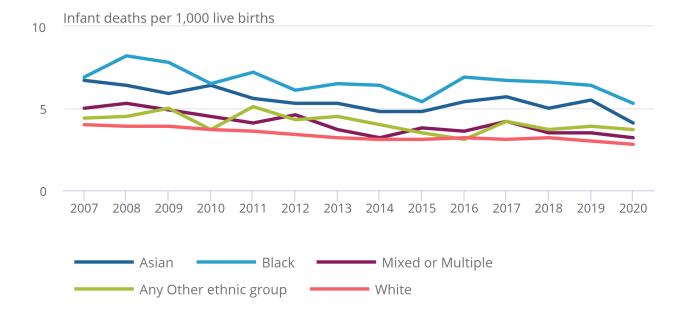
Infant mortality rates <u>differ by ethnicity of baby</u>. In 2020, babies from the Black ethnic group continued to have the highest rate, followed by the Asian ethnic group (Figure 4). Small numbers of births and deaths in some ethnic groups can cause rates to fluctuate over time. Future data will confirm whether decreases seen in 2020 for these groups will be sustained.

Figure 4: Babies from the Black ethnic group continue have the highest infant mortality rate

Infant mortality rates by ethnicity of baby, England and Wales, 2007 to 2020

Figure 4: Babies from the Black ethnic group continue have the highest infant mortality rate

Infant mortality rates by ethnicity of baby, England and Wales, 2007 to 2020



Source: Office for National Statistics – Child and infant mortality in England and Wales: 2020

Maternal age

Infant mortality rates continue to vary by maternal age. In 2020, babies born to mothers aged 30 to 34 years had the lowest risk of infant mortality at 3.0 deaths per 1,000 live births. Babies born to mothers aged 40 years and over had the highest risk at 4.8 deaths per 1,000 live births.

Deprivation

Infant mortality risk varies by socio-economic background. In 2020, the 10% most deprived areas in England had higher infant mortality rates compared with the 10% least deprived areas. These trends were consistent with <u>previous years</u>. Equivalent trends in Wales are more difficult to assess because of fewer infant deaths and resultant fluctuation.

In 2020, babies with a parent from higher managerial, administrative and professional backgrounds had a rate of 2.6 deaths per 1,000 live births. Babies with a parent from routine and manual backgrounds had a rate of 4.8 deaths per 1,000 live births.

Other known risk factors

There are a range of <u>other risk factors (PDF, 1.05MB)</u> associated with infant mortality that we are unable to assess from the data we currently have available. Examples of these include maternal health factors such as smoking, alcohol consumption and obesity.

5. Child and infant mortality data

Child mortality (death cohort) tables in England and Wales

Dataset | Released 17 February 2022

Live births, stillbirths and linked infant deaths occurring annually in England and Wales, and associated risk factors.

Infant mortality (birth cohort) tables in England and Wales

Dataset | Released 17 February 2022

Annual statistics on births and infant deaths based on babies born in a calendar year that died before their first birthday linked to their corresponding birth notification and their corresponding death registration.

6. Glossary

Stillbirth

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

Early neonatal

The death of an infant aged under seven days.

Perinatal

A baby who was recorded as either a stillbirth or early neonatal death.

Neonatal

The death of an infant aged under 28 days.

Postneonatal

The death of an infant aged 28 days to 1 year.

Infant

The death of those aged under one year.

Child

The death of those aged 1 to 15 years.

7. Measuring the data

Child and infant mortality data are based on deaths occurring in 2020. In normal circumstances, deaths of all ages are typically registered within five days. In the case of infant deaths, this delay can be much longer if the death requires coroner investigation. Consequently, our annual death cohort for infant deaths occurring in 2020 includes infant deaths registered before 1 October 2021.

Coronavirus and child and infant mortality statistics

It is possible that registration delays for infant deaths have been longer than normal during the coronavirus (COVID-19) pandemic. Infant deaths that occurred in 2020 may have not yet been captured by the data included in this release.

We are continuing to monitor the implications of any delays in 2020 death registrations on our data coverage. We are also exploring the possibility of using alternative data sources to estimate child and infant deaths in a timelier manner

Linking infant deaths to their corresponding birth registration and birth notification improves our understanding of the main characteristics of the baby and the baby's parents. Prior to 2020, over 95% of infant deaths were successfully linked to their birth registration and birth notification.

In 2020 the linkage rate was lower than normal at 90.5%, which is likely to have been affected by <u>birth registration</u> <u>delays</u> during the coronavirus pandemic. More information can be found in our <u>User guide to child and infant</u> <u>mortality statistics</u>.

Differences between the ONS and MBRRACE-UK figures

The Office for National Statistics' (ONS) figures on perinatal mortality are based on all births and deaths registered via the General Register Office regardless of gestational age, and all stillbirths registered at 24 weeks or more gestation in line with the <u>Stillbirth (Definition) Act 1992</u>.

Births below 24 weeks gestational age and births that resulted in a death following termination of pregnancy are excluded from the <u>Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK (MBRRACE-UK)</u> figures on stillbirth and neonatal mortality rates. Reasons for these exclusions can be found in the <u>Child and infant mortality statistics Quality and Methodology Information (QMI)</u> report.

8. Strengths and limitations

More information on the strengths, limitations and accuracy of the data are available in the <u>Child and infant</u> mortality statistics Quality and Methodology Information (QMI) report.

Our <u>User guide to child and infant mortality statistics</u> provides further information on data quality, legislation and procedures relating to mortality and cause of death coding, and includes a full glossary of terms.

National Statistics status for child and infant mortality

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The most recent <u>assessment and compliance check (PDF, 152MB)</u>, confirms National Statistics status in May 2012. The improvements since the last review are that we:

- ran a user consultation in 2017 to improve presentation and to meet our user needs, details of which are available in the <u>response</u> to the consultation
- updated our analysis on the impact of registration delays on mortality statistics
- updated our policy for protecting confidentiality in tables of births and deaths statistics

9. Related links

Registrar General Annual Report 2020

Bulletin | Released 21 October 2021

Data for Northern Ireland on stillbirths and infant deaths, based on registrations.

Vital Events Reference Tables 2020

Tables | Released 17 August 2021

Data for Scotland on stillbirths and infant deaths based on registrations.

Vital statistics in the UK: births, deaths and marriages

Dataset | Released 3 December 2021

Annual UK and constituent country figures for births, deaths, marriages, divorces, civil partnerships and civil partnership dissolutions.

Births in England and Wales: 2020

Bulletin | Released 14 October 2021

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

Deaths registered in England and Wales: 2020

Bulletin | Released 6 July 2021

Registered deaths by age, sex, selected underlying causes of death and the leading causes of death.

Contains death rates and death registrations by area of residence and single year of age.

Unexplained deaths in infancy, England and Wales: 2019

Bulletin | Released 25 August 2021

Annual data on sudden infant deaths in England and Wales and infant deaths for which the cause remained unascertained after a full investigation, with associated risk factors.