

Statistical bulletin

Child and infant mortality in England and Wales: 2021

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



Contact:
Amy Watts, Charlotte Hill, Zoe
Jones
health.data@ons.gov.uk
+44 1329 444110

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1 . Main points

- In 2021, 2,323 infant deaths (aged under one year) and 852 child deaths (aged 1 to 15 years) occurred in England and Wales; these figures were both higher than in 2020 (2,226 and 789, respectively).
- In 2021, the infant mortality and child mortality rates in England and Wales were 3.7 deaths per 1,000 live births and 8 deaths per 100,000 population, respectively, both following a general decline since the 1980s.
- The neonatal mortality rate (aged under 28 days) was 2.7 deaths per 1,000 live births in England and Wales in 2021; with the mortality rate increasing for neonates of shorter gestational ages.
- In 2021, infants with a low birthweight (less than 2,500g), Black ethnicity, or a mother aged under 20 years were at the highest risk of infant mortality.
- In 2021, the main causes of death among infants and children aged 28 days to 15 years continued to be congenital malformations, deformations and chromosomal abnormalities.
- In 2021, there were 32 deaths of infants and children aged 28 days to 15 years where the underlying cause was “coronavirus (COVID-19).”

2 . Trends in child and infant mortality

In 2021, there were 852 child deaths (aged 1 to 15 years) and 2,323 infant deaths (aged under one year) in England and Wales. This equates to a child mortality rate of 8 deaths per 100,000 population, and an infant mortality rate of 3.7 deaths per 1,000 live births (see [Table 1 of our accompanying dataset](#)). Although the child and infant mortality rates are [higher than in 2020](#), both have followed an overall declining trend since records began in the 1980s.

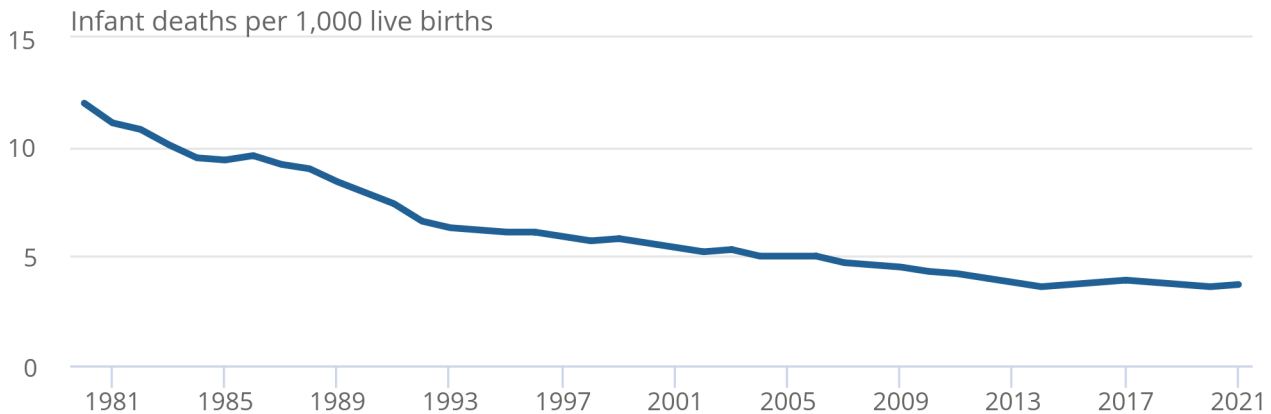
The overall decline in infant mortality rates since 1980 (Figure 1) likely reflects general improvements in healthcare and more specific improvements in antenatal and neonatal care.

Figure 1: There has been an overall decline in infant mortality rate since 1980

Infant mortality rate, England and Wales, 1980 to 2021

Figure 1: There has been an overall decline in infant mortality rate since 1980

Infant mortality rate, England and Wales, 1980 to 2021



Source: Office for National Statistics – Child and infant mortality in England and Wales: 2021

In England, the West Midlands continued to have the highest infant mortality rate (with 5.6 deaths per 1,000 live births), while the South West had the lowest (2.5 deaths per 1,000 live births; see [Table 3 of our accompanying dataset](#)).

There were 103 infant deaths in 2021 in Wales, and an infant mortality rate of 3.6 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, because there are fewer births and deaths recorded in each area. As a result, they are less reliable at describing trends than the combined England and Wales rate.

3 . Stillbirths and neonatal deaths

A neonatal death is the death of an infant aged under 28 days. In England, the government has [an ambition to halve the 2010 neonatal mortality rate](#) for babies born at a gestational age of 24 weeks or over, and to halve the 2010 stillbirth rate, by 2025.

The neonatal mortality rate ambition in England is 1.0 deaths per 1,000 live births of babies born at 24 weeks or over. In 2021, the rate was 1.4 deaths per 1,000 live births (Figure 2). Achieving the ambition in 2021 would have required at least 220 fewer neonatal deaths of babies born at 24 weeks or over, so that the total did not exceed 592.

The stillbirth ambition in England is 2.6 stillbirths per 1,000 births. In 2021, the rate was 4.1 stillbirths per 1,000 births (Figure 2). Achieving the ambition in 2021 would have required at least 896 fewer stillbirths, so that the total did not exceed 1,556.

Figure 2: Fewer stillbirths and neonatal deaths needed to meet government ambition by 2025

Stillbirths and neonatal mortality (babies born at 24 weeks or over) rates, England, 2010 to 2021

Notes:

1. Stillbirth data refer to stillborn babies born at 24 weeks and over.
2. Neonatal death data in this chart refer to babies who were born alive at 24 weeks and over, and died within 28 days of birth.

Download the data

[.xlsx](#)

In Wales, the stillbirth rate was 4.4 per 1,000 births. The neonatal mortality rates were 2.6 per 1,000 live births for babies of all gestations, and 1.6 per 1,000 live births for babies born at 24 weeks or over (see [Table 2 of our accompanying dataset](#)).

4 . Neonatal and infant mortality risk factors

Gestational age

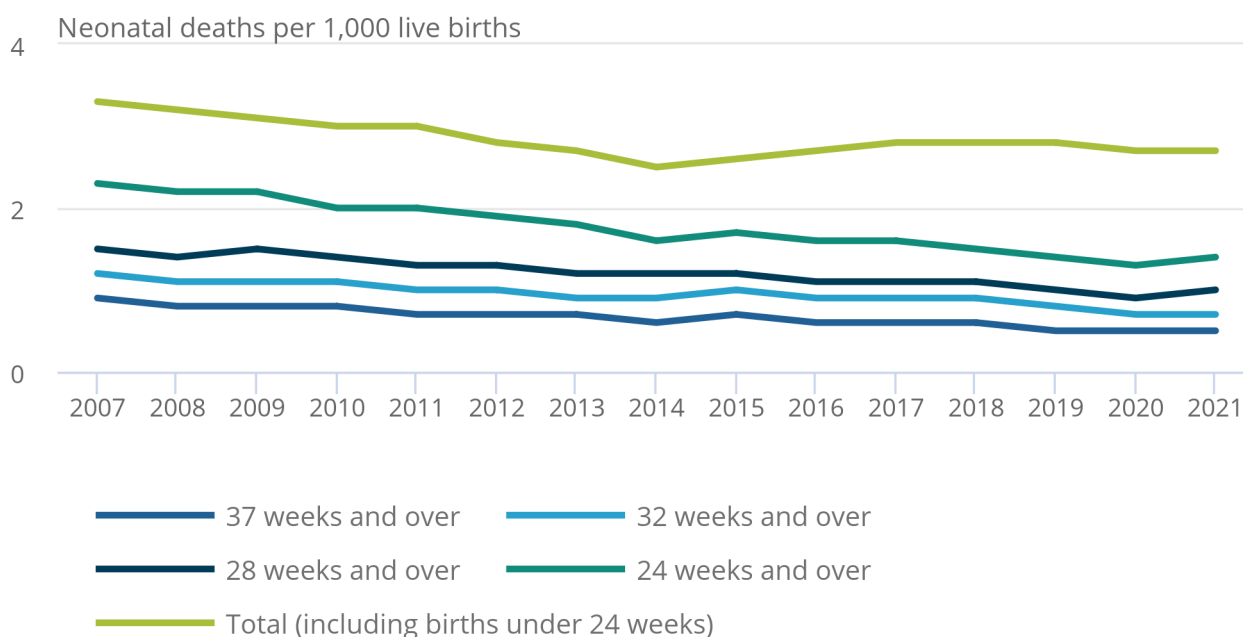
In 2021, the overall neonatal mortality rate was 2.7 deaths per 1,000 live births which is consistent with the 2020 rate. Babies born at shorter gestational ages have higher neonatal mortality rates than those born at longer gestational ages (Figure 3). This is likely because of complications related to prematurity.

Figure 3: Shorter gestational ages are associated with higher neonatal mortality

Neonatal mortality rates by gestational age, England and Wales, 2007 to 2021

Figure 3: Shorter gestational ages are associated with higher neonatal mortality

Neonatal mortality rates by gestational age, England and Wales, 2007 to 2021



Source: Office for National Statistics – Child and infant mortality in England and Wales: 2021

Cause of death

Congenital malformations, deformations and chromosomal abnormalities continued to be the leading cause of death in 2021 among infants and children aged 28 days to 15 years, followed by neoplasms, also known as an abnormal growth of tissue (see [Table 8 of the accompanying dataset](#)). Immaturity-related conditions accounted for 48.7% of neonatal deaths, with congenital anomalies and antepartum infections (infections occurring just before birth) together accounting for another 42.7%.

In 2021, coronavirus (COVID-19) appeared on the death certificates of 43 infants and children aged 28 days to 15 years, of which 32 recorded COVID-19 as the underlying cause of death. The percentage of the deaths of infants and children aged 28 days to 15 years where COVID-19 appeared on the death certificate increased from 1.0% in 2020 to 2.9% in 2021. This is [lower than the equivalent figure of 13.3% for the general population in 2021](#).

Some [mortality statistics](#) on deaths because of and involving COVID-19 may differ as they are based on the number of deaths registered in a reference period, rather than when they occurred.

Birthweight

Low birthweight babies, weighing less than 2,500g, had an infant mortality rate of 30.2 deaths per 1,000 live births in 2021, an increase from 27.9 deaths per 1,000 live births in 2020. Normal birthweight babies, weighing 2,500g or over, had an infant mortality rate of 0.8 deaths per 1,000 live births, consistent with the 2020 rate (see [Table 9 of our accompanying dataset](#)).

Ethnicity

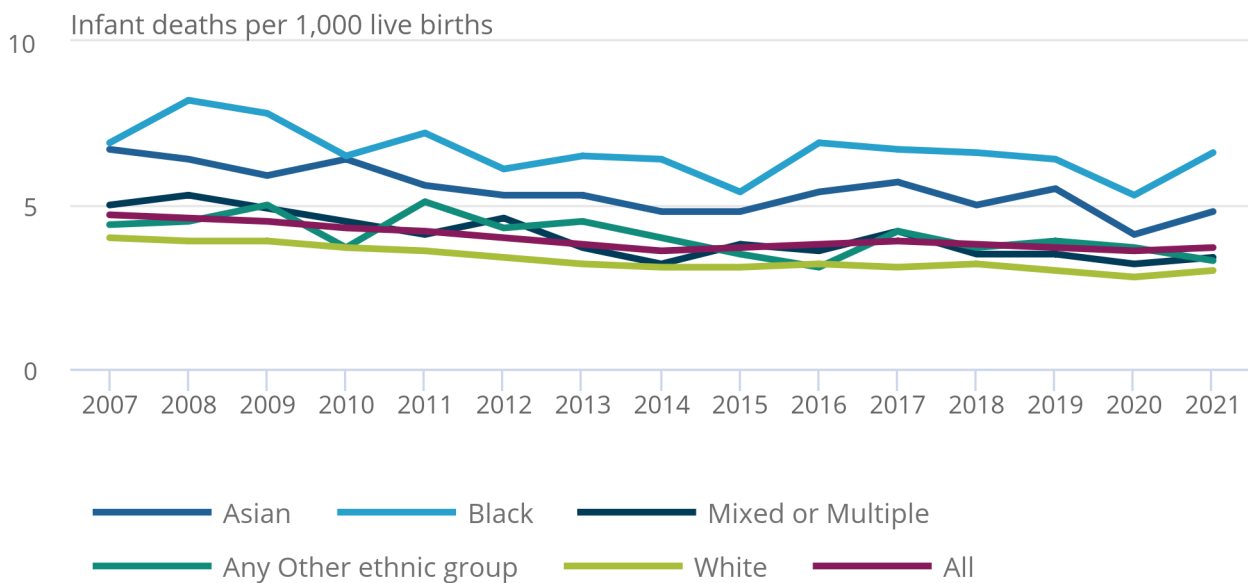
In 2021, babies from the Black ethnic group continued to have the highest rates of death, followed by the Asian ethnic group (see [Table 18 of our accompanying dataset](#)). For both groups, the infant mortality rates have increased in comparison with 2020 (Figure 4). However, small numbers of births and deaths in some ethnic groups can cause larger fluctuations over time.

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

Infant mortality rates by ethnicity of baby, England and Wales, 2007 to 2021

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

Infant mortality rates by ethnicity of baby, England and Wales, 2007 to 2021



Source: Office for National Statistics – Child and infant mortality in England and Wales: 2021

Maternal age

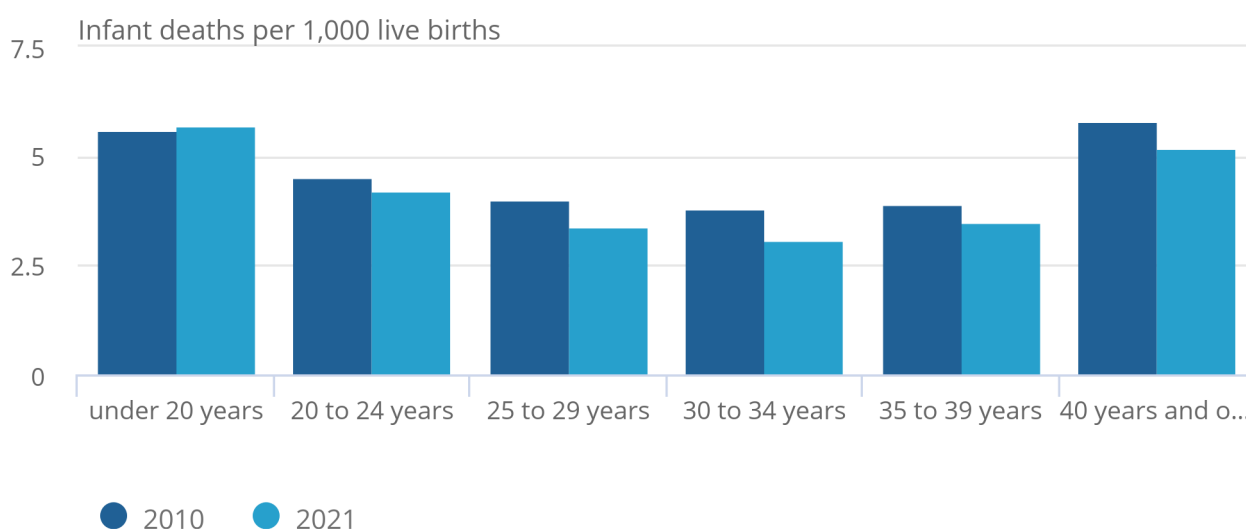
In 2021, babies born to mothers aged 30 to 34 years had the lowest risk of infant mortality, at 3.1 deaths per 1,000 live births. Babies born to mothers aged under 20 years had the highest risk, at 5.7 deaths per 1,000 live births (see [Table 10 of our accompanying dataset](#)). In comparison with 2010, the infant mortality rate of babies has reduced for every maternal age group, except babies of mothers aged under 20 (Figure 5).

Figure 5: There is an increase in the infant mortality rate for mothers aged under 20 years when compared with 2010

Infant mortality rates by age of mother, England and Wales, 2010 and 2021

Figure 5: There is an increase in the infant mortality rate for mothers aged under 20 years when compared with 2010

Infant mortality rates by age of mother, England and Wales, 2010 and 2021



Source: Office for National Statistics – Child and infant mortality in England and Wales: 2010 and 2021

Deprivation

Infant mortality risk varies by socio-economic background. In 2021, the 10% most deprived areas in England had higher infant mortality rates compared with the 10% least deprived areas (see [Table 21 of our accompanying dataset](#)). Additionally, babies with a parent from a routine and manual background had higher infant mortality rates compared with babies with a parent from a higher managerial, administrative and professional background (see [Table 12 of our accompanying dataset](#), and [Section 7 of the National Statistics Socio-economic classification](#) for class definitions).

Equivalent trends in Wales are more difficult to assess because of fewer infant deaths and the resultant fluctuation.

Other known risk factors

There are a range of [other risk factors \(PDF, 1.05MB\)](#) 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 1 March 2023

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 1 March 2023

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

Child

The death of those aged 1 to 15 years.

Child mortality rate

The number of child deaths, per 100,000 live births.

Early neonatal

The death of an infant aged under seven days.

Infant

The death of those aged under one year.

Infant mortality rate

The number of infant deaths, per 1,000 live births.

Neonatal

The death of an infant aged under 28 days.

Perinatal

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

Postneonatal

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

Stillbirth

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

7 . Measuring the data

Child and infant mortality data are based on deaths occurring in 2021. 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 2021 includes infant deaths registered before 9 October 2022.

Coronavirus (COVID-19) and child and infant mortality statistics

[Birth registrations](#) and infant death registrations may have been delayed during the coronavirus pandemic. This may have reduced the likelihood of infant death registrations being received in time to be included in this release, and so were less likely to be linked with a birth registration and notification.

Linking infant deaths to their 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 fell to 90.5%. In 2021, the linkage rate partially recovered to 94.9%. More information can be found in our [User guide to child and infant mortality statistics methodology](#).

8 . Strengths and limitations

Quality

More information on the strengths, limitations and accuracy of the data is available in our [Child and infant mortality statistics Quality and Methodology Information \(QMI\) report](#).

Our [User guide to child and infant mortality statistics methodology](#) provides further information on data quality, legislation and procedures relating to mortality and cause of death coding, and includes a full glossary of terms.

9 . Related links

[Northern Ireland Statistics and Research Agency \(NISRA\) registrar general annual Report 2021](#)

Bulletin | Released 21 September 2022

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

[National Records of Scotland vital events reference tables 2021](#)

Data tables | Released 28 June 2022

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

[Vital statistics in the UK: births, deaths and marriages](#)

Dataset | Released 24 February 2023

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

[Births in England and Wales: 2021](#)

Bulletin | Released 9 August 2022

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

[Deaths registered in England and Wales: 2021](#)

Bulletin | Released 27 January 2023

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: 2020](#)

Bulletin | Released 8 September 2022

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.

10 . Cite this statistical bulletin

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