

NCMD

National Child Mortality Database

Knowledge, understanding and
learning to improve young lives

Child Death Review Data: Year ending 31 March 2022

November 2022

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Acknowledgements

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1. Introduction

Child death review (CDR) processes are mandatory for Child Death Review Partners (CDR Partners) in England. The CDR process has been in place in England since 1 April 2008 and was previously the responsibility of Local Safeguarding Children Boards (LSCBs). CDR partners are responsible for reviewing the deaths of all children up to the age of 18. This function is carried out through local Child Death Overview Panels (CDOPs). The overall purpose is to understand why children die and to put in place interventions to protect other children and reduce the risk of future deaths.

In 2018, the Department of Health and Social Care (DHSC) published new and revised [statutory and operational guidance](#) related to CDR.

The [National Child Mortality Database \(NCMD\)](#) launched on 1 April 2019 and collates data collected by CDOPs in England from reviews of all children who die at any time after birth and before their 18th birthday. There is a statutory requirement for CDOPs to collect this data and to provide it to NCMD, outlined in the [statutory and operational guidance](#). The guidance requires all CDR Partners to gather information from every agency that has had contact with the child, during their life and after their death, including health and social care services, law enforcement, and education services. This is done using a set of statutory CDR forms and the information is then submitted to NCMD.

The data in this report summarises the number of notifications where the child died between 1 April 2021 and 31 March 2022 and the number of reviews of children whose death was reviewed by a CDOP between 1 April 2021 and 31 March 2022. The data is compared to the previous two years. It should be read in conjunction with the following data tables, where more detail is available:

- Reference Tables – CDR Data (year ending 31 March 2022)

Throughout this report the term ‘infant’ is used to describe a child under 1 year of age and ‘child’ is used to describe all children from 0 – 17 years.

2. Deaths that occurred between 1 April 2021 and 31 March 2022

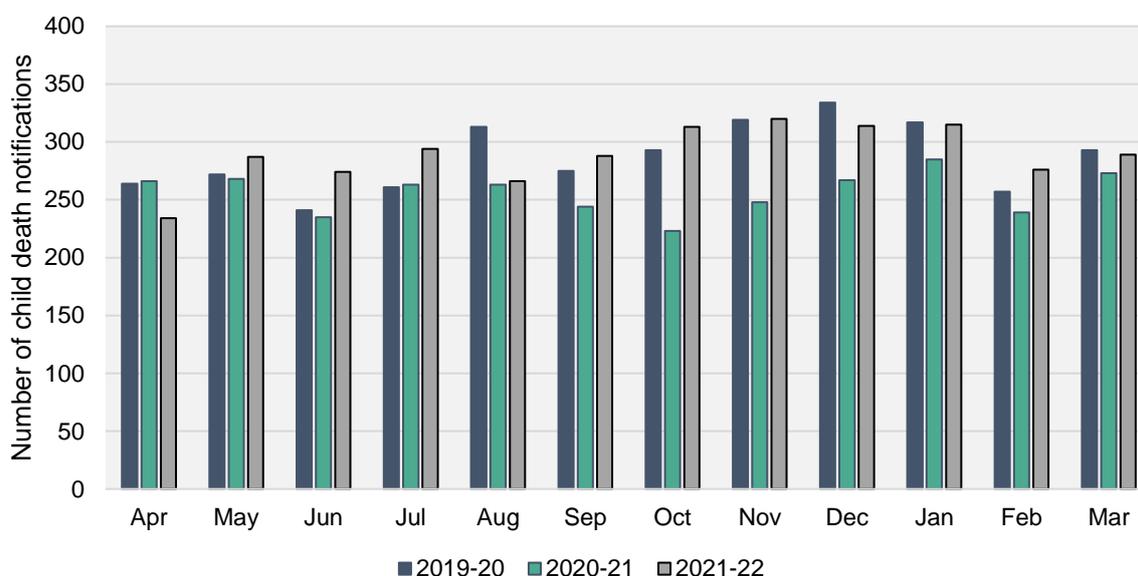
This section of the report focuses on the number of deaths and provides descriptive analysis on the demographics of **children who died between 1 April 2021 and 31 March 2022** in comparison to the previous years.

The data presented here represents child deaths that were submitted to NCMD that were going to be reviewed by a CDOP in England.

The number of child death notifications ([Table 5](#))

NCMD received 3,470 notifications of child deaths from CDOPs in England where the child died between 1 April 2021 and 31 March 2022. This is 396 greater deaths than the previous year. The apparent return to pre-pandemic levels shows the reduction of deaths in the winter of 2020.

Figure 1: The number of child death notifications received by Child Death Overview Panels by month of death



Data source: NCMD

Infant and child death rates ([Tables 1 and 2](#))

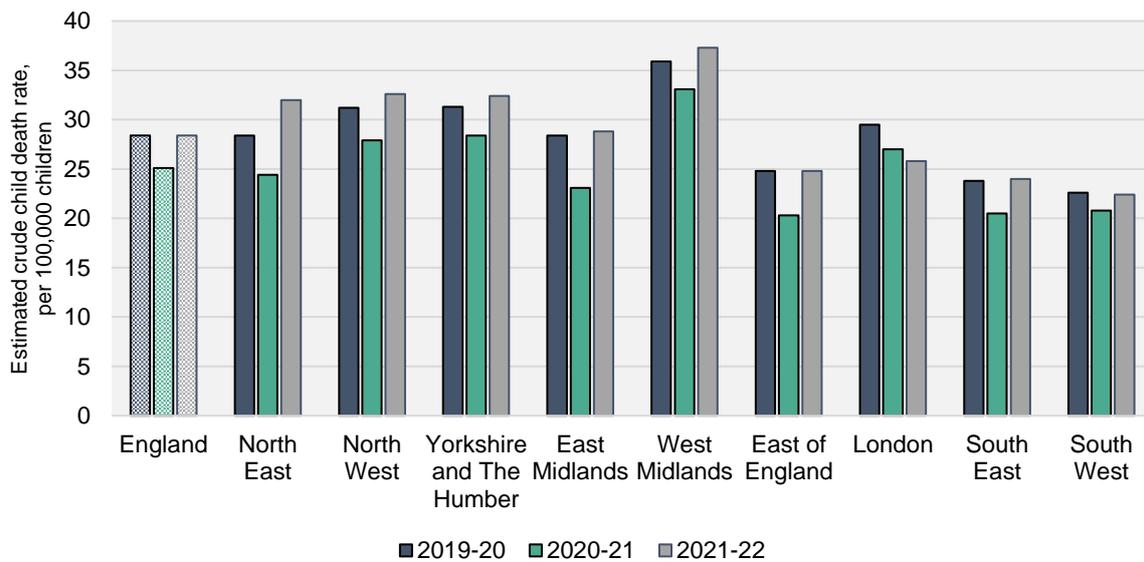
The overall child death rate and infant death rate presented here have been calculated using different populations. The child death rate includes all children who died at any time after birth and before their 18th birthday and has been calculated using [data from the mid-year population estimates](#) for 0 – 17 year olds, or for the year 2021-22, a derived estimate of population (see Technical Information section) .

The child death rate is presented per 100,000 population. The infant death rate (deaths of children under 1 year of age) has been calculated using [data for live births](#), and the rate is presented per

1,000 live births. Whilst these rates are presented at regional level, there may be significant differences in rates between CDOPs within each region.

There were 28.4 child deaths per 100,000 population in England for 2021-22. This is an increase from 2020-21 but the same rate as in 2019-20. The child death rate increased for all regions in England other than London.

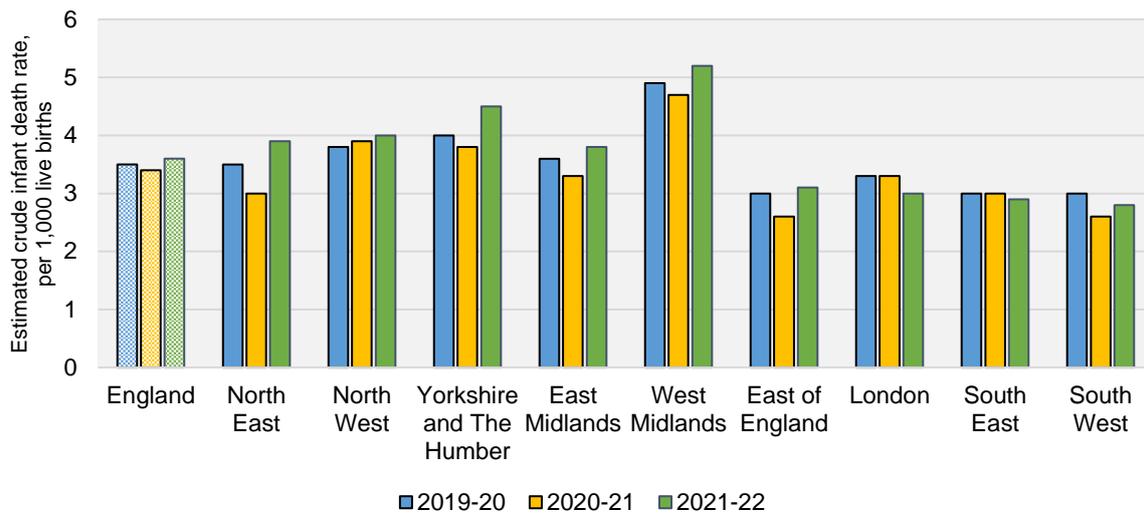
Figure 2: The estimated crude child death rates per 100,000 population by region



Data source: NCMD, [ONS mid-year population estimates](#)

There were 3.6 infant deaths per 1,000 live births in England for 2021-22, increasing from 3.4 the previous year and 3.5 two years prior. The infant death rate increased for most regions in England.

Figure 3: The estimated crude infant death rates per 1,000 live births by region



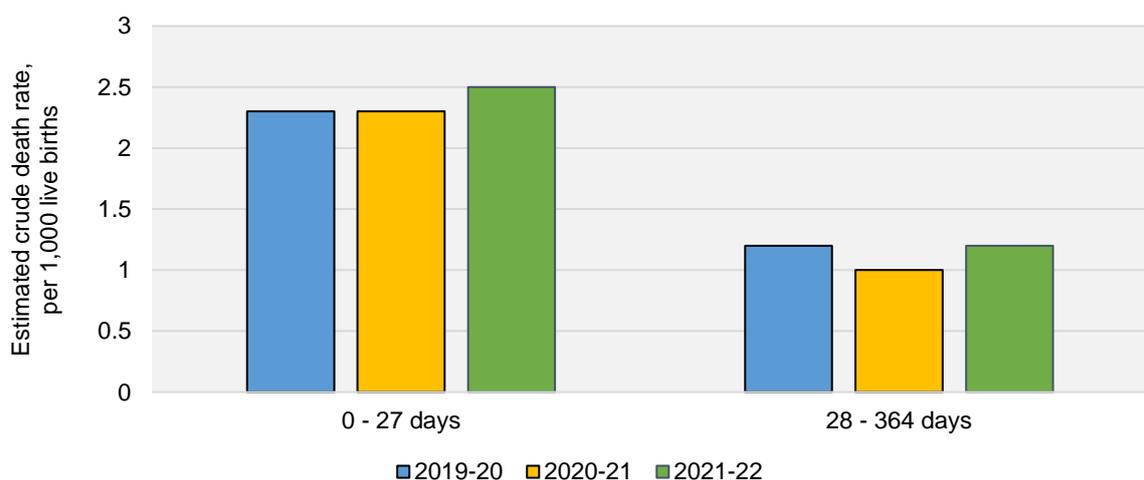
Data source: NCMD, [ONS live births](#)

Further data on regional rates of death by age group is available in Table 2.

Age group and sex ([Table 3](#))

The death rate of children aged between 0 and 27 days inclusive (2.5 deaths per 1,000 live births) remains at over twice that of the death rate for children aged between 28 and 364 days (1.2 deaths per 1,000 live births). Death rates have slightly increased for the 0-27 days age group (from 2.3 to 2.5 deaths per 1,000 live births). Rates have also increased for the 28-364 age group returning to the rate observed in 2019-20.

Figure 4: The estimated crude death rates per 1,000 live births by age group

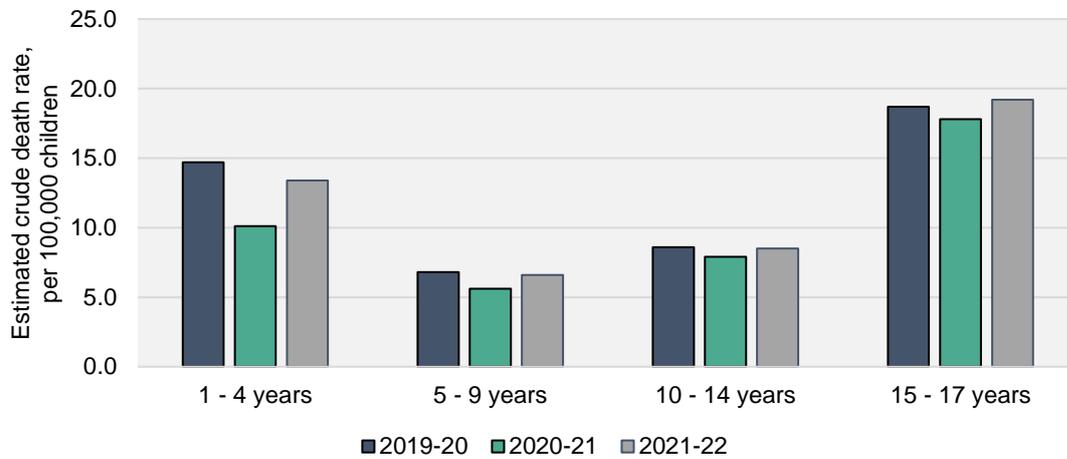


Data source: NCMD, [ONS live births](#)

For children ages 1 and over, the highest death rate remains to be for children aged between 15-17 years (19.2 deaths per 100,000 population).

Death rate increased across all age groups in comparison to the previous year but only the 15-17 age group has exceeded the 2019-20 rate.

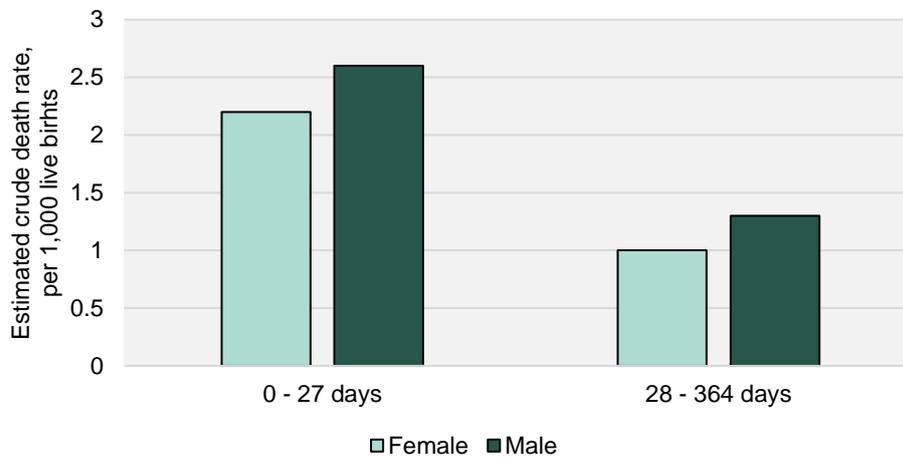
Figure 5: The estimated crude death rates per 100,000 population by age group



Data source: NCMD, [ONS mid-year population estimates](#)

The death rate for males remained higher than that of females across all age groups. The largest difference in death rate between males and females can be seen in the 15-17 years age group.

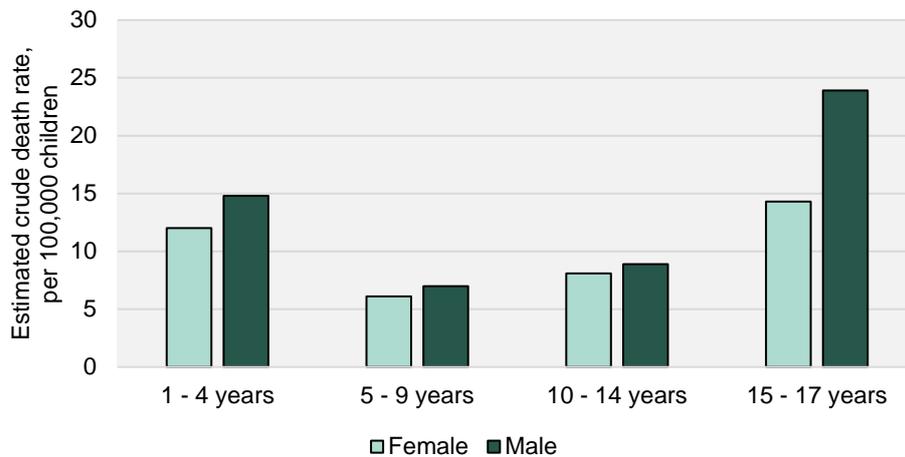
Figure 6: The estimated crude death rates per 1,000 live births by sex and age group, year ending 31 March 2022



Data source: NCMD, [ONS live births](#)

Deaths where the child's sex was not known or incomplete were excluded

Figure 7: The estimated crude death rates per 100,000 population by sex and age group, year ending 31 March 2022



Data source: NCMD, [ONS mid-year population estimates](#)
 Deaths where the child's sex was not known or incomplete were excluded

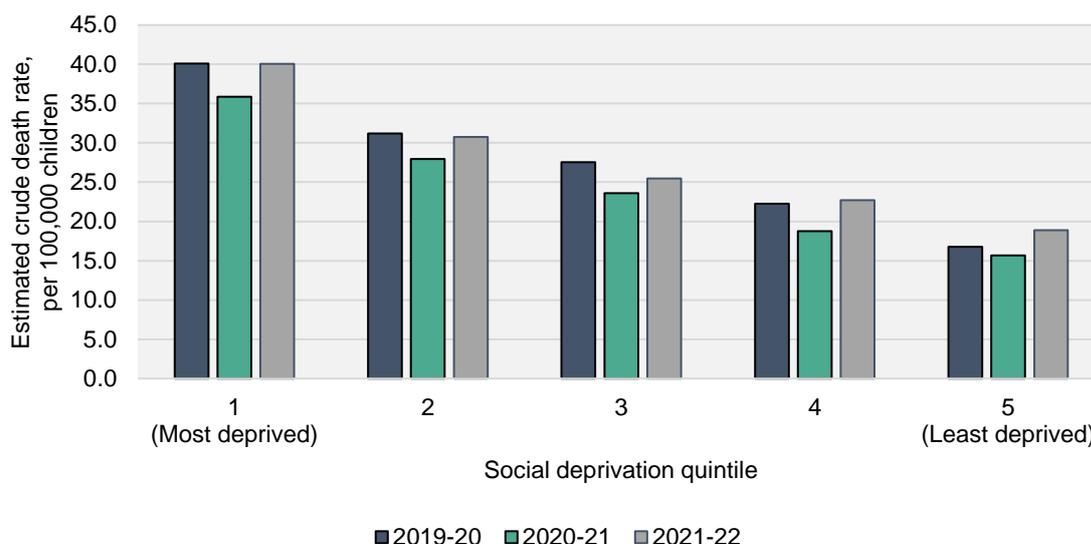
Social deprivation ([Table 4](#))

For analysis on social deprivation and mortality, the postcode of residence for each child was linked to its corresponding [Index of Multiple Deprivation \(IMD 2019\)](#) which is calculated to the granularity of around 1,500 people. Each neighbourhood is ranked from most deprived to least deprived, which are then divided into five equal sized groups (quintiles).

The child death rate of children resident in the most deprived neighbourhoods in England (40.1 deaths per 100,000 children) was more than twice that of children resident in the least deprived neighbourhoods (18.9 deaths per 100,000 children).

The death rate increased for all quintiles in 2021-22 in comparison to the previous year, and reverted back to similar levels in 2019-20. The rate surpassed 2019-20 rates only in the least deprived quintiles.

Figure 8: The estimated crude child death rates per 100,000 population by social deprivation quintile



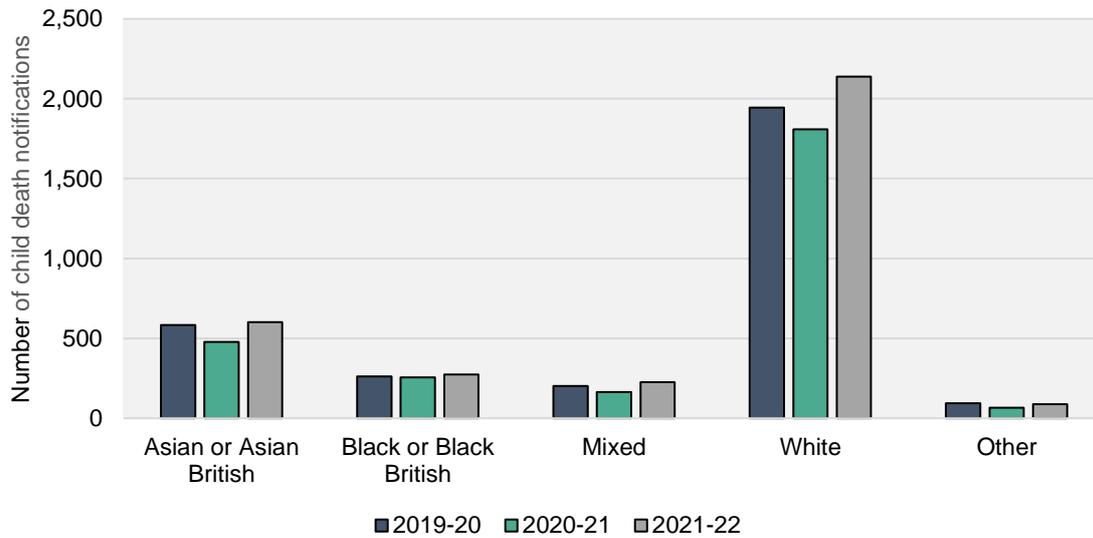
Data source: NCMD, [ONS mid-year population estimates](#)
 Data where the child's postcode was not known or incomplete have been excluded

Ethnic group ([Table 6](#))

Ethnic group was recorded in 3,330 (96%) death notifications. Of these, 64% (n=2,139) of deaths were of children who were recorded as being from a White ethnic group, 18% (n=601) of deaths were of children from an Asian or Asian British background, 8% (n=275) were from a Black or Black British background, 7% (n=227) were from a Mixed background and 3% (n=88) were from any other ethnic group. These proportions were similar to the previous year.

4% of all child death notifications in 2021-22 were submitted where the ethnicity of the child was not known or it was not recorded. This drop from 13% in 2020-21 is a marked improvement in completeness for ethnicity records. Continued improvement in this completeness should help ensure mortality differences by ethnicity can be measured accurately in future years and the future release of the most recent census data will enable more in depth analyses of differences across ethnic groups.

Figure 9: The number of child death notifications received by Child Death Overview Panels by ethnic group (where known)

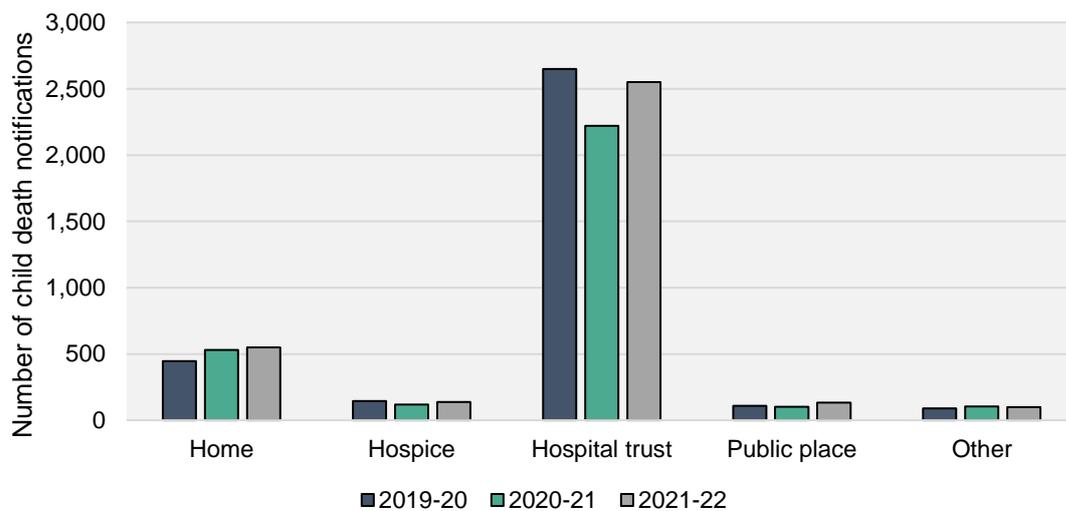


Data source: NCMD
Deaths where the child's ethnic group was not known or incomplete have been excluded

Place of death (Table 7)

The place of death is defined at data collection as where the child is believed to have died regardless of where the death was confirmed. It was recorded in 99% (n=3447) of death notifications. Where the place of death was known, the majority (74%, n=2,551) of deaths occurred in a hospital trust, consistent with the previous year. Deaths that occurred on neonatal units accounted for 869 (25%) deaths; the largest proportion of deaths across all locations recorded.

Figure 10: The number of child death notifications received by Child Death Overview Panels by place of death



Data source: NCMD
Other includes: Abroad, school, and any other place of death
Deaths where the place of death was not known or incomplete were excluded

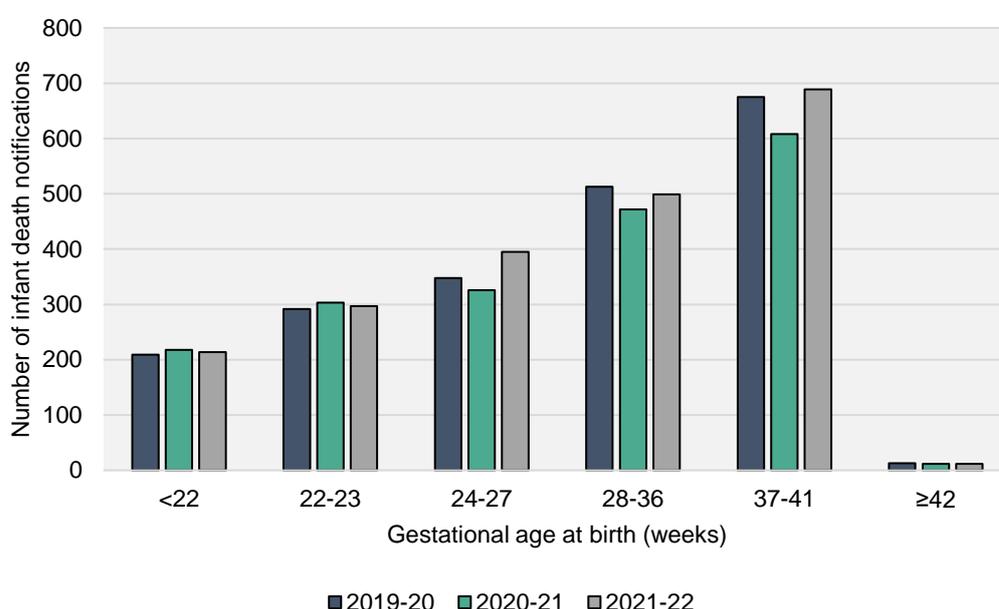
Gestational age at birth (Tables 8 and 9)

Gestational age was recorded in 2,106 (98%) death notifications of infants. This is an increase of completed data in comparison to the previous year, where 93% was completed.

Where gestational age was known, 67% (n=1,405) of infants were born at a premature gestational age (before 37 weeks). There was an increase in the number of deaths where the infant was born at 24 weeks or later compared to the previous year. Due to increases in the data completed for gestational age for infants, any interpretation should be cautious.

A further breakdown of gestational age by age group and place of death can be found in Tables 8 and 9.

Figure 11: The number of infant death notifications received by Child Death Overview Panels by gestational age at birth



Data source: NCMD
Data only presented for deaths of infants (<1 year)
Deaths where the child's gestational age at birth was not known or incomplete were excluded

Category of death (Table 10)

Notification to NCMD immediately after death includes basic demographic data and the suspected cause of death. The CDOP offices then undertake a data collection process, and the cause and category of death is confirmed once the case has been reviewed by CDOP some months later.

Table 10 presents child deaths that occurred in 2019-20 by the CDOP review category of death. This has been included as 88% of deaths during this year have now been reviewed and subsequent years will be updated in future publications.

3. Deaths reviewed between 1 April 2021 and 31 March 2022

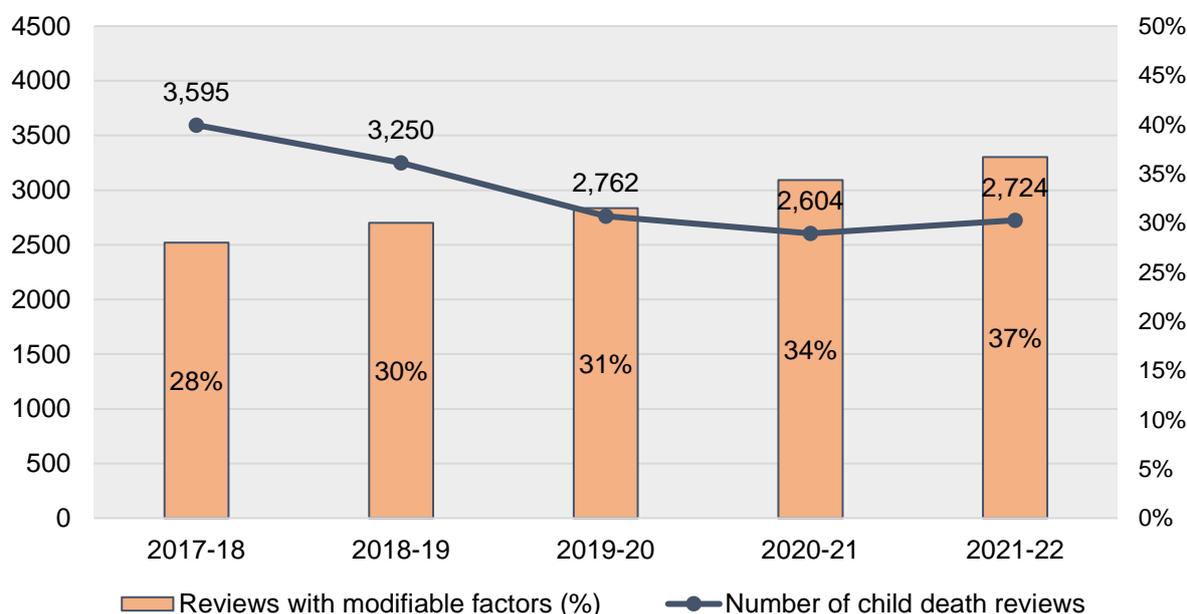
This section focuses on data from the completed child death reviews by the CDOPs where the child death review took place between 1 April 2021 and 31 March 2022 (the child may have died in previous years). CDOPs in England must review all deaths of children normally resident in the local area and, if they consider it appropriate, any non-resident child who has died in their area.

The number of child death reviews (Table 11)

2,724 child deaths were reviewed by CDOPS in England between 1 April 2021 and 31 March 2022. Of these, 16% (n=434) were reviews of children who died within the same year and 84% (n=2,290) were reviews where the child died before 1 April 2021 (Table 18). This is a decrease from the previous year where 20% of reviews were of children who died within the same year.

The proportion of reviews that identified modifiable factors continues to rise each year with 37% of deaths reviewed during 2020-21 identifying modifiable factors. Modifiable factors are defined as factors which, by means of nationally or locally achievable interventions, could be modified to reduce the risk of future child deaths.

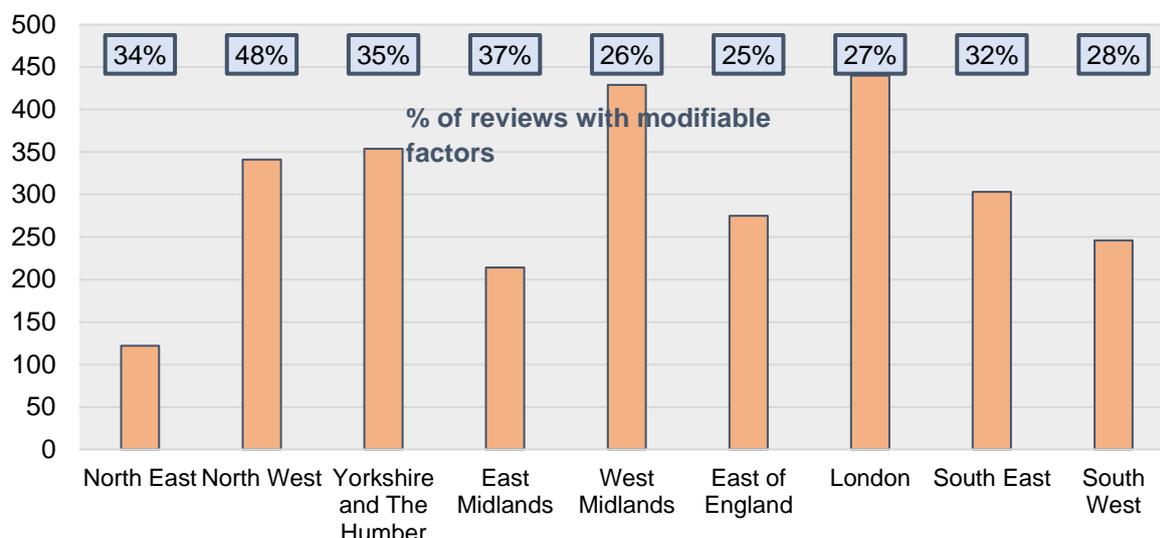
Figure 12: The number of child death reviews completed by Child Death Overview Panels in England and the proportion of cases with modifiable factors identified, by year of review



Data source: NCMD, LSCB1 Return 2018-19

Figure 13 shows the number of reviews completed and the proportion that identified modifiable factors for each region.

Figure 13: The number of child death reviews completed by Child Death Overview Panels and the proportion of cases with modifiable factors identified by region, year ending 31 March 2022



Data source: NCMD

Social Care and Child Safeguarding Practice Reviews (Tables 16 and 17)

A Child Safeguarding Practice Review (CSPR) (previously Serious Case Review) is conducted when a child is seriously harmed, or dies, as a result of abuse or neglect. The review identifies how local professionals and organisations can improve the way they work together. Out of the number of child death reviews completed throughout the year, NCMD received information that a CSPR was carried out for at least 96 child deaths. Of these, 77% identified modifiable factors in the review, in comparison to 35% where a CSPR did not take place.

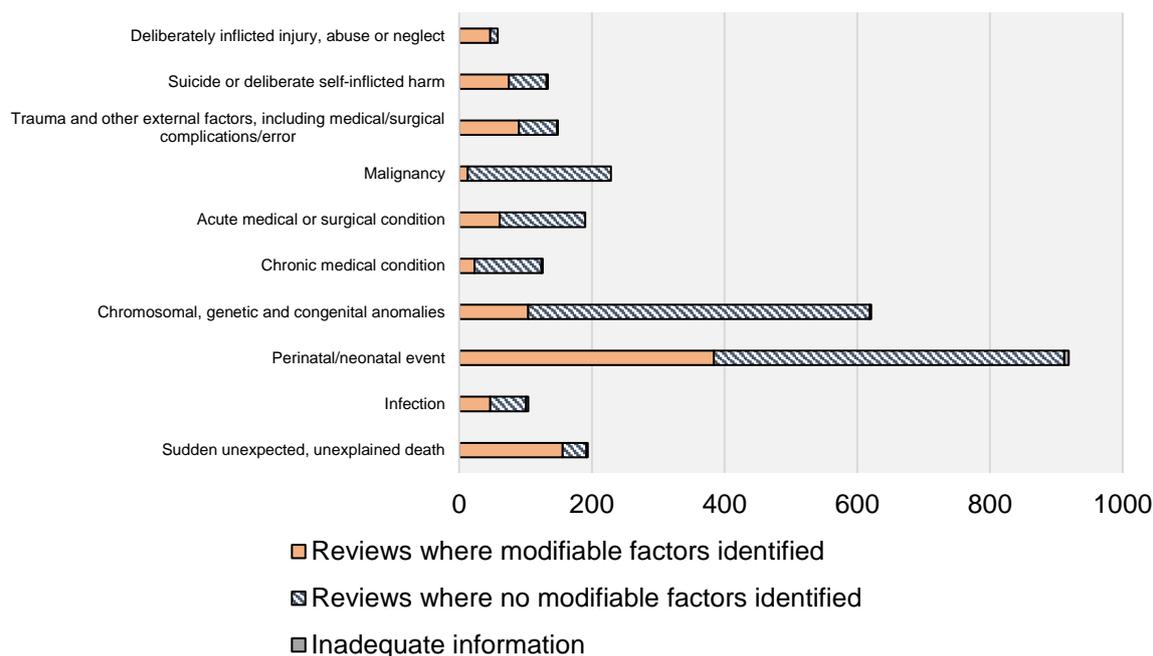
The NCMD received information on 378 children whose death was reviewed during the year who were known to social care at the time of their death, and nearly half of these children (n=166, 44%) were a child in need. 41% of reviews where the child was known to social care at the time of their death had modifiable factors identified in the review, in comparison to 33% of reviews where the child was never known to social care.

Category of death (Table 12)

For child deaths reviews during 2021-22 (the child may have died in previous years), one third (34%, n=919) of reviews recorded a primary category of Perinatal/neonatal event, and a further 23% (n=621) recorded a primary category of Chromosomal, genetic and congenital anomalies. Deaths categorised as Malignancy (n=229, 8%) and Sudden unexpected and unexplained death (n=194, 7%) were the next most frequent categories.

Analysis on reviews that identified modifiable factors is available in [this section](#).

Figure 14: The number of reviews completed by Child Death Overview Panels by primary category of death and whether modifiable factors were identified, year ending 31 March 2022



Data source: NCMD

A further breakdown by sub-category of death is available in Table 12, and by age group in Table 13.

Modifiable factors (Tables 12 and 18)

During the review, the CDOP is responsible for identifying any modifiable factors in relation to the child's death. Such modifiable factors are defined as factors which, by means of nationally or locally achievable interventions, could be modified to reduce the risk of future child deaths.

Figure 14 shows that deaths categorised as *Deliberately inflicted injury, abuse or neglect* (n=47/58, 81%) had the highest proportion of reviews with modifiable factors, followed by *Sudden unexpected and unexplained* (n=156/194, 80%), *Trauma or other external factors* (n=90/149, 60%) and *Suicide or deliberate self-inflicted harm* (n=75/135, 56%). Deaths that were categorised as *Malignancy* had the lowest proportion of reviews that identified modifiable factors (n=13/229, 6%).

The age group with the highest percentage of modifiable factors identified was 28-364 days (45%) followed by 15-17 years (43%).

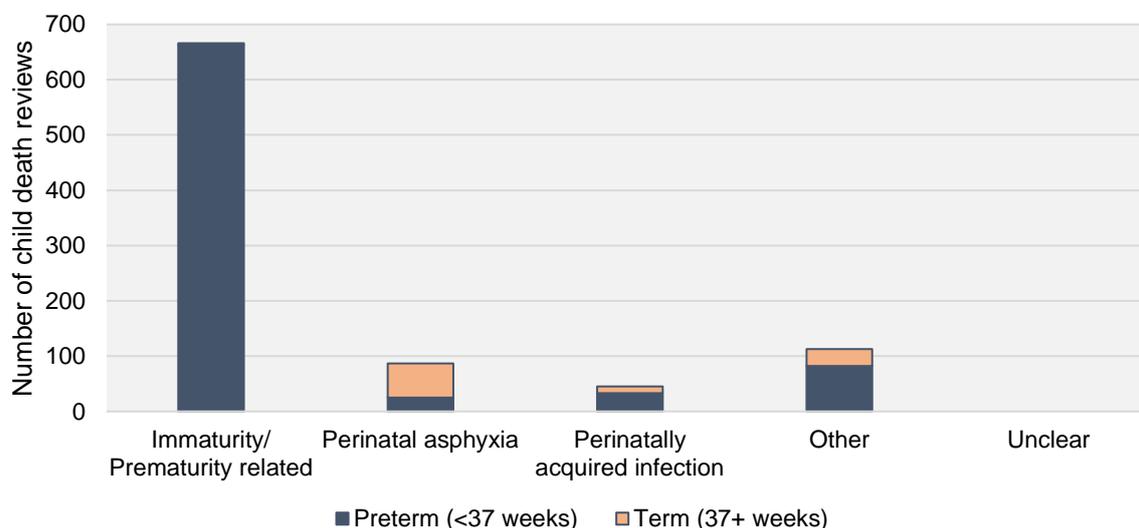
Perinatal/neonatal events (Table 14)

With deaths categorised as Perinatal/neonatal event continuing to represent one third of death reviews (34%, n=919) and having the highest number of reviews that identified modifiable factors (n=384), a sub-category field for these deaths was introduced into the analysis form.

Of all deaths categorised as Perinatal/neonatal event with sufficient information (n=919), 72% (n=663) were immaturity/prematurity related deaths, meaning that deaths due to immaturity/prematurity

accounted for around a quarter (24%) of all child deaths reviewed. 90 (10%) children whose deaths were categorised as Perinatal/neonatal event were due to perinatal asphyxia, 62 of whom were born at a term gestation (37 weeks and over). 45 deaths (5%) were due to a perinatally acquired infection.

Figure 15: The number of reviews categorised as *Perinatal/Neonatal event* by Child Death Overview Panels by sub-category, year ending 31 March 2021



Data source: NCMD

Deaths where the child's gestational age was not known or incomplete have been excluded from the figure.

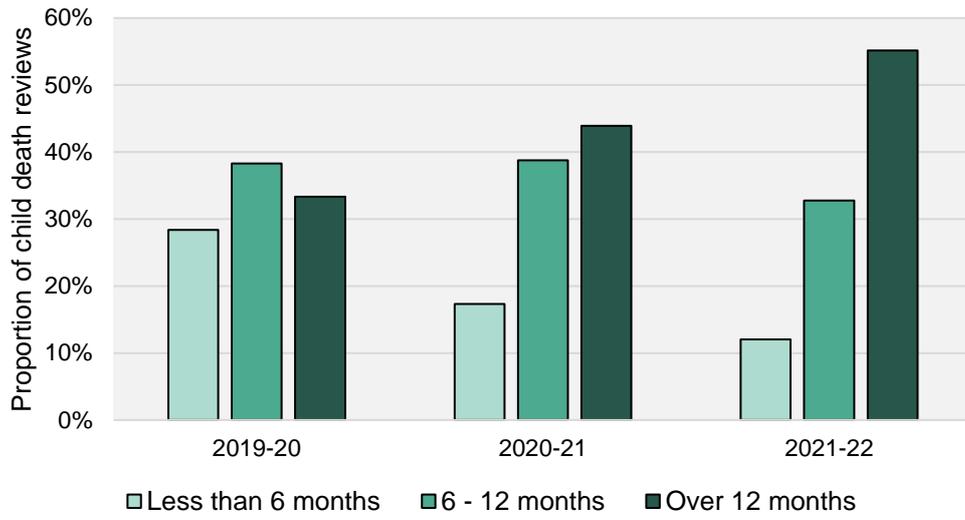
Duration of reviews ([Table 19](#))

434 (16%) reviews completed by CDOPs were of children who died between 1 April 2021 and 31 March 2022, while 2,290 (84%) reviews were of children who died during previous years.

The median time between the date of death and the date of the CDOP review was 397 days. Of the 2,724 reviews, 33% of reviews took between 6 and 12 months to complete, and 55% took over 12 months to complete.

The reviews that took over 12 months to complete presented the highest proportion of reviews where modifiable factors were identified (43%), compared to 27% for reviews taking under 6 months.

Figure 16: The percentage of reviews completed by Child Death Overview Panels by the number of months the review took to complete



Data source: NCMD

4. List of Reference Tables

Table 1	Number and rate of child death notifications received by Child Death Overview Panels by region
Table 2	Number and rate of child death notifications received by Child Death Overview Panels by region and age group
Table 3	Number and rate of child death notifications received by Child Death Overview Panels by age group and sex
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Table 5	Number of child death notifications received by Child Death Overview Panels by month of death
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Table 20	The percentage completion rate of data fields in reviews completed by Child Death Overview Panels
Table 21	The number of death notifications received and the number of reviews that were completed by Child Death Overview Panels

All reference tables can be found [here](#).

5. Further information

Child death reviews: year ending 31 March	This publication can be found at the following websites: <ul style="list-style-type: none"> • 2018 and 2019: https://digital.nhs.uk/data-and-information/publications/statistical/child-death-reviews • 2017 and earlier: https://www.gov.uk/government/collections/statistics-child-death-reviews
Child death review forms	The data collection forms used to gather information on child deaths can be found here: https://www.gov.uk/government/publications/child-death-reviews-forms-for-reporting-child-deaths
Child death review statutory and operational guidance	The child death review statutory and operational guidance can be found here: https://www.gov.uk/government/publications/child-death-review-statutory-and-operational-guidance-england
Child death review process	For information on the child death review processes, see Chapter 5 of the 'Working Together to Safeguard Children' document which can be found here: https://www.gov.uk/government/publications/working-together-to-safeguard-children--2
NCMD Second Annual Report 2021	https://www.ncmd.info/2021/06/10/2nd-annual-report/
NCMD publications	https://www.ncmd.info/publications/
For further support and information please access the Information for Families section of the NCMD website	https://www.ncmd.info/families/

6. Technical information

Case ascertainment and limitations

All CDOPs continue to submit data to NCMD on an ongoing basis. It is noted in the Working Together (2018) guidance that there is a responsibility on Registrars of Deaths to notify CDOPs of all deaths of children under 18 years of age, to ensure that CDOPs know about all deaths of children in their area. It is important that CDOPs regularly cross reference their data with local Registrars to provide assurance that all child deaths are being reported and reviewed.

Data presented within this release is based on data that has been submitted to NCMD by CDOPs. For the 2021-22 data year, all 58 CDOPs submitted death notifications that they received to NCMD, however NCMD is aware that 1 CDOP did not submit all of their death reviews, so some totals may be underestimated. This data will be added to future publications once these reviews are updated in the database.

In addition, denominators used to calculate rates (e.g. child death rate) are based on population estimates, and comparisons using ethnicity data in particular should be treated with caution due to limitations of the comparator data (based on England and Wales data from the 2011 census). Population for year ending 2021 was not available at the time of publication due to the 2021 census data not yet being available. The population profile for this year was derived from 2020 data, assuming no net migration, and using birth data from 2020 to derive the population for those under 1 year of age. Additional data from the 2021 census will allow for a more reliable comparison in future reports. The NCMD is dependent on accurate data entry by the CDOPs, and specifically, category of death is presented within the report as it was submitted by the CDOP.

For further information on NCMD data processing please see our [Privacy Notice](#).