



Appendix 5a

# Child Death Overview Panel

## Annual Report 2020 - 2021

CDOP annual report on partnership arrangements and trends/patterns highlighted in child deaths reviewed across the Blackburn with Darwen, Blackpool and Lancashire region during the reporting period

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## Foreword by the Independent Chair

I have been involved in the Pan-Lancashire CDOP on and off since 2013 and 2020/21, this has been one of the most difficult years, reflecting an historical period in which all partners had to deal with the pressures of managing a global pandemic, and left no-one unaffected.

All the public sectors were directly involved in responding to unprecedented demands and changes in roles, which was clearly going to have an impact on child death review processes. The impact on processes has been managed incredibly well, with delays restricted to relatively few cases, particularly those involving Coroners' Inquests.

The report aims to not only reflect the cases the panel has considered throughout 2020/21, but also the achievements of the partnership, future priorities for action, and issues related to the implementing the statutory child death review processes, during a year affected by the Coronavirus pandemic.

A Memorandum of Understanding between CDOP and the statutory partners for child death review (Local Authorities and Clinical Commissioning Groups) clarifies the respective expectations of each partner for appropriate effective delivery and oversight of effective child death review system. As Chair, it will be my responsibility to ensure that CDOP provides oversight and assurance of the child deaths review processes, to the statutory partners.

I would like to thank all the Panel members, for their continued commitment and hard work, and in particular to how they switched swiftly to virtual working, without compromising the quality of the panel meetings. I would also like to thank Rachel Rimmer and Rebecca Gill for the hard work that goes on behind the scenes to ensure that the Panel runs smoothly and keeps pace with the changing landscape.



Mike Leaf  
Child Death Overview Panel Chair  
Blackburn with Darwen, Blackpool & Lancashire

## Introduction

This is the thirteenth annual report since the Child Death Overview Panels (CDOP) became statutory in April 2008. It is the ninth report as a pan-Lancashire Panel and the second year of a new relationship between CDOP and the Statutory Partners (Clinical Commissioning Groups and Local Authorities). CDOP has a statutory responsibility to review the deaths of all children up to the age of 18 years old (excluding babies who are stillborn, late foetal loss and planned terminations of pregnancy carried out within the law.) resident within the three Local Authority areas of Blackburn with Darwen (BwD) Council; Blackpool Council; and Lancashire County Council (LCC). It includes any infant death where a death certificate has been issued, irrespective of gestational age.

The publication of the Child Death Review Statutory and Operational Guidance in 2018 builds on the requirements set out in Chapter 5 of Working Together to Safeguard Children 2018 and details how individual professionals and organisations across all sectors involved in the Child Death Review should contribute to guided standardised practice nationally and enable thematic learning to prevent future child deaths. Child Death Review Partners are identified as Local Authorities and any Clinical Commissioning Groups for the local area as set out in the Children and Social Work Act 2017. The guidance sets out the full process that follows the death of a child, who is normally resident in England and builds on the statutory requirements set out in Working Together to Safeguard Children (2018).

The purpose of the CDOP is to collect and analyse information about each child death in order to identify any matters relating to the death(s), that are relevant to the welfare of children in the area or to public health and safety, to consider whether action should be taken that might help to prevent similar deaths in the future. The aim of the child death review process is to ensure that information is systematically captured for every death to enable learning and prevent future deaths and share learning with colleagues regionally and nationally so the findings have wider impact.

This report provides information on trends and patterns in child deaths reviewed:

- during the last reporting year (2020-21)
- over the last five years (2015-21)
- involving the Pan-Lancashire SUDC Service (2020-21)

The CDOP has a statutory requirement to prepare and publish a local report on:

- what has been done as a result of the child death review arrangements
- how effective the child death review arrangements are in practice

It also makes overarching and individual recommendations to partners across the three local authority areas based on the analysis.

## Membership & Attendance

The Child Death Overview Panel business meetings are held on a bi-monthly basis, whilst the case discussion panel meet monthly. Both have had consistent organisational commitment since they were established in 2008. The Chair of the CDOP is Mike Leaf, Independent Health Improvement and Development Lead. During 2020/21 the CDOP has continued to review the deaths of children across

pan Lancashire and have embraced the use of technology; panel meetings were held virtually when the country went into a national lockdown at the start of the global pandemic of Coronavirus.

The panel meetings comprise of two separate panels, a specialist neonatal panel and an all-age panel. The Pan-Lancashire CDOP membership is made up of senior multi-agency professionals who have knowledge and expertise in fields such as public health, children's social care, paediatrics, police, education etc. The panel consists of representation from a range of organisations who can make a valuable contribution when undertaking a child death review bringing together experts from a range of sectors. In an attempt to ensure equal representation across the three areas a rota system has been utilised for case discussion meetings which aims to ensure:

1. All three areas are represented
2. All professional areas are represented
3. It is equitable for all; the number of meetings attended is based proportionately on number of child deaths per area

During 2020/21, the CDOP panel met on 12 occasions (6 neonatal panels, 6 all age panels). The table below documents the attendance by each agency/ area of expertise for business and case discussion meetings. 100% of business meetings had all geographical representation, with a member from each area being in attendance at each meeting. Additionally, throughout the reporting year the panel has had 15 observers.

Business Meetings (6 meetings)		Case Discussion Meetings (6 meetings)		Neo-natal Review Meetings (6 meetings)	
Agency	Attendance	Agency	Attendance	Agency	Attendance
Chair	6 (100%)	Chair	6 (100%)	Chair	6 (100%)
Lancashire Constabulary	6 (100%)	LANCON	6 (100%)	Lancashire Constabulary	6 (100%)
Children's Social Care	4 (67%)	Children's Social Care	5 (83%)	Children's Social Care	6 (100%)
Public Health	6 (100%)	Public Health	4 (67%)	Public Health	4 (67%)
Lead Nurse for SUDC	6 (100%)	Named Nurse for Safeguarding	6 (100%)	Named Nurse for Safeguarding	6 (100%)
SUDC Prevention Chair	6 (100%)	Named Midwife	5 (83%)	Named Midwife	5 (83%)
Paediatrician	6 (100%)	Paediatrician	6 (100%)	Paediatrician	6 (100%)
CSAP Business Manager	6 (100%)	SUDC Service	6 (100%)	SUDC Service	6 (100%)
CCGs	6 (100%)	Education (School/ Early Years Rep)	6 (100%)	Neonatal Specialist	No rep

LSCFT	6 (100%)	North West Ambulance Service	5 (83%)	Virgin Care	6 (100%)
Virgin Care	6 (100%)	Virgin Care	6 (100%)	NWAS	NA

## CDOP Priorities for 2020/21 Update

CDOP Priority	RAG	Comments
Improve the quality and outputs of the child death review processes.		CDOP ensures all agencies understand the new guidance and relevant processes and can demonstrate improvements against national standards through the self-assessment framework. CDOP works to reduce the variability of reporting forms and routinely missing information e.g., male partner's information in particular. The CDOP maximises the potential of the eCDOP database to improve efficiency.
Monitor the delivery of the 7-day SUDC service.		CDOP continues to provide oversight of the SUDC Service and advocate changes where appropriate. Catherine Hefferon, Public Health Registrar, recently lead on the review of the Sudden Unexpected Death in Children (SUDC) 7 Day Service, supported by CDOP.
Support a suicide thematic review, including cases from South Cumbria.		It has been agreed, there will not be suicide thematic review. In its place there will be a Covid Impact review.
Ensure that the reduction of infant/child death forms part of integrated multi-agency strategies.		The SUDC Prevention Group is integrated with the PH Infant Mortality Strategic Plan. The CDOP maintains links to the Public Health Healthy Child Group.

## Annual Report Recommendation Update 2019/20

Local safeguarding and health and wellbeing partners were asked to:

Ensure all professionals providing information to CDOP to ensure that forms are returned within the statutory three-week deadline and are completed as fully as possible, including details of father or other male carers in the household, before they are submitted to CDOP.

Whilst there have been measurable improvements over the course of the year, there are still some gaps in information which are being followed up.

Ensure that there are interagency initiatives to reduce the prevalence of modifiable factors identified in the under one population including:

- Safe sleeping
- Risk factors for reducing premature births including:
- High BMI (including healthy diet and physical activity)
- High blood pressure (linked to high BMI)
- Smoking
- Alcohol use
- Substance misuse
- Domestic violence
- Mental health
- Diabetes (often linked to BMI)
- Lack of physical activity

## CDOP Reporting Arrangements

The three local authorities have delegated the responsibility of the child death review arrangements to their respective Directors of Public Health (DsPH). The eight Clinical Commissioning Groups (CCGs) of Blackburn with Darwen, Blackpool, Chorley and South Ribble, East Lancashire, Fylde and Wyre, Greater Preston, Morecambe Bay and West Lancashire, maintain accountability and have delegated the same responsibility to their Safeguarding Health Executive (SHE) Group who will co-ordinate with NHS England.

The pan-Lancashire CDOP will be accountable to the statutory partners and will report to each, at appropriate intervals and by exception. Relevant reports will go to statutory strategic partnerships including the Blackburn with Darwen, Blackpool & Lancashire Children's Safeguarding Assurance Partnership (CSAP), Health and Wellbeing Boards and the Community Safety Partnership.

## CDOP Subgroup updates

### SUDC Prevention Group

The SUDC Prevention Group continues to be coordinated by the pan-Lancashire CDOP and is funded by the CDOP budget (£15,000). The funding maintains the supply of safer sleep materials to agencies across Pan-Lancashire.

2020 was an unprecedented year where many frontline practitioners had to quickly flex their ways of working to ensure safety during the Coronavirus pandemic. This in mind there was still progress made on ensuring that all partnership organisations are undertaking to promote Safer Sleep messages and embed the national ICON: Babies Cry, You Can Cope! across Lancashire.

Having developed more hard-hitting materials and resources to disseminate messages a risk assessment tool was also developed for Safer Sleep. Health, (Health Visitors and midwives) and Social Care partners agreed to utilise the tool in practice before undertaking auditing activity. The audit is planned for 2021/22.

Working virtually has had challenges and primary care services have been stretched with maintaining a service through the Coronavirus pandemic and the ensuing mass vaccination programme,



ultimately impacting on the roll out of ICON: Babies Cry, You Can Cope! Which is still awaited and a focus for 2021/22.

In February the long-standing chair retired, and a replacement has come into the role. Noting that there was an emphasis on the Safer Sleep agenda, a review of membership, TOR and aims/aspirations of the group is currently ongoing. The chair aims to refocus the group on all aspects of SUDC Prevention whilst developing sub-groups for specific focused workstreams. It was felt that to cover all SUDC prevention business and operational models within one meeting was too much. The SUDC Prevention group will become an oversight group, initially with 3 operational sub-groups focused on:

- ICON: Babies Cry, You Can Cope! Campaign
- Safer Sleep Campaign
- Accident Prevention

This change is intended to allow more focused groups to develop work plans that are more focused, with the right people able to input and mobilise them.

## Child Death Investigation Group

Lancashire Constabulary continue to host the multi-agency Child Death Investigation Group which aims to promote best investigative practice, prevention work, identify areas for development and continue the established partnership working in this critical area. Membership consists of police detectives, SUDC Nurses, Crime Scene Investigation Managers, Children's Social Care, the CDOP management team as well as the North West Ambulance Service (NWS) Safeguarding Team. This group functions as a vibrant and engaged forum that enables frontline practitioners to exchange professional views on recent cases, facilitating professional challenge where needed, ensuring that policy and process is fit for purpose, striving for consistently high standards of response across all agencies.

A particular focus (and benefit) of the group is its ability to provide rapid access to the detail of recent SUDC cases as well as the experiences of the professionals involved. This continues to provide a vital link to CDOP, improving the review process through the enrichment of relevant data. In addition, this access is channelled towards staff development, informing training requirements and seeking sustained improvements in service delivery.

In the last 12 months the Child Death Investigation Group has continued to increase its contribution to preventative work, with members seeking to be proactive within their own areas of responsibility. This focus led to discussions regards the annual Safer Sleep campaign and resulted in a number of initiatives involving a number of partner agencies represented in the group. Working together, and despite the restrictions placed upon them due to the Coronavirus pandemic, the group have delivered online training and launched internal media campaigns to raise awareness and gather support in respect of preventing child deaths caused or contributed to by unsafe sleeping environments. Additionally, the group have developed and implemented a prompt on the digital devices used by police officers to record incidents and crimes. The prompt appears when an officer inputs the details of a child below the age of five, reminding the officer to check for safe sleep arrangements at the location they have attended. If concerns are identified the officer is instructed to submit a referral which is then directed to health colleagues for early intervention. Since the launch of the initiative, we have seen an increase in referrals by the police in respect of concerns for unsafe sleep environments.



The group has also continued to develop the innovative interactive training product originally designed and delivered last year for front-line uniformed police officers. Building on the positive feedback received regards the training style, modules have now been created for detective constables, detective sergeants and detective inspectors. Each module equips officers with the skills and knowledge to effectively respond to a SUDC incident and focuses carefully on the recipients understanding of their specific role in the collective response.

## Key Successes

### Positive Recognition

To recognise and encourage good practice, or where agencies have gone above and beyond their expected duties, CDOP send letters of good practice. Whilst it is the panel's responsibility to identify learning and trends from child deaths across pan-Lancashire, the panel feel it is important to recognise the excellent care that professionals provide for the children and families that they work with.

The panel recently wrote to a local school that went beyond what was expected of them to ensure a young person receiving cancer treatment settled into high school. The young person was anxious about other pupils' reactions to their cancer, the school was well prepared, and support was put in place before the start of term.

### Safer Sleep Briefings

Over the years there has been a significant reduction in infant deaths largely due to an increase in evidence-based knowledge and practice. Recognising the fact that unsafe sleeping arrangements are a feature in a number of sudden and unexpected childhood deaths in pan Lancashire, virtual briefing sessions were provided for the multi-disciplinary workforce who have contact with the parents, carers and relatives of babies and children up to the age of five. The briefings provided staff with evidence-based research to support their discussions with parents to make informed choices regarding safer sleep and raise awareness to factors associated with Sudden Unexpected Death in Childhood. The sessions were attended by over 280 delegates in total and received excellent feedback, some of which can be found below. A full evaluation is available upon request.

*"Gave me information that I can use to educate my patients and identify safety concerns. Highlighting that every setting where the baby is put down has risks, and to be aware of them. Everything was useful but the 'Spot the Risks' section was very good".*

### Safer Sleep Assessment & Action Plan Tool

The tool was launched in April 2020, it can be used by any agency or professional working with families. The sleep assessment tool is designed to be completed with parents during home visits to support a family to better understand their own level of risk regarding safer sleeping. The tool will be reviewed as part of the wider Safer Sleep audit that is scheduled to take place in autumn.

## Sudden Unexpected Deaths in Childhood Service

The three local authorities have delegated the responsibility of the child death review arrangements to their respective Directors of Public Health (DsPH). The eight Clinical Commissioning Groups (CCGs) of Blackburn with Darwen, Blackpool, Chorley and South Ribble, East Lancashire, Fylde and Wyre, Greater Preston, Morecambe Bay and West Lancashire, maintain accountability and have delegated

the same responsibility to their Safeguarding Health Executive (SHE) Group who will co-ordinate with NHS England.

The Sudden and Unexpected Deaths in Children Service (SUDC) is a unique nurse-led service that has provided the health element of the Pan-Lancashire multi-agency Joint Agency Response process to a sudden and unexpected death of a child since September 2008. The SUDC Nurse fulfils the role of the Lead Health Professional. When a child dies unexpectedly a Joint Agency Response is triggered and the SUDC Nurse is responsible for coordinating the health response to that death.

### Joint Agency Responses

There have been 45 unexpected deaths between 1<sup>st</sup> April 2020 and 31<sup>st</sup> March 2021. This figure is higher than last year (37). *Figure 1* shows the total numbers of deaths per year since the service began.

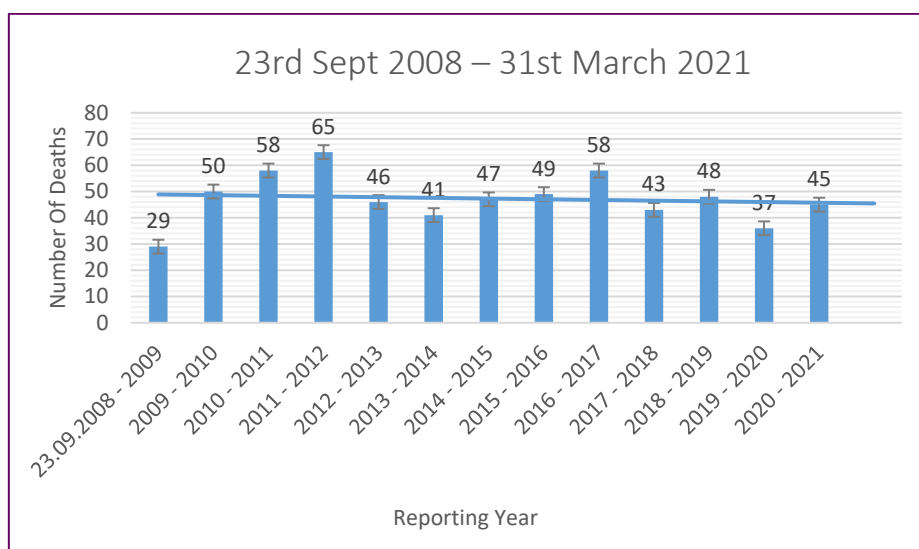


Figure 1: Unexpected deaths since 2008

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Figure 2: Unexpected deaths by area

In total since 1<sup>st</sup> April 2020, the SUDC Service has responded to 10 cases where co-sleeping/unsafe sleeping environment was a feature. As mentioned earlier in the report, there were 45 unexpected deaths during the reporting year, therefore, deaths relating to unsafe sleeping practices account for 22.2% of the overall cases.

Figure 3 below, shows the total number of deaths per year since 2016, with the number of unsafe sleep cases each year. The percentage figure is the percentage of unsafe sleep deaths out of the total amount of deaths for the year.

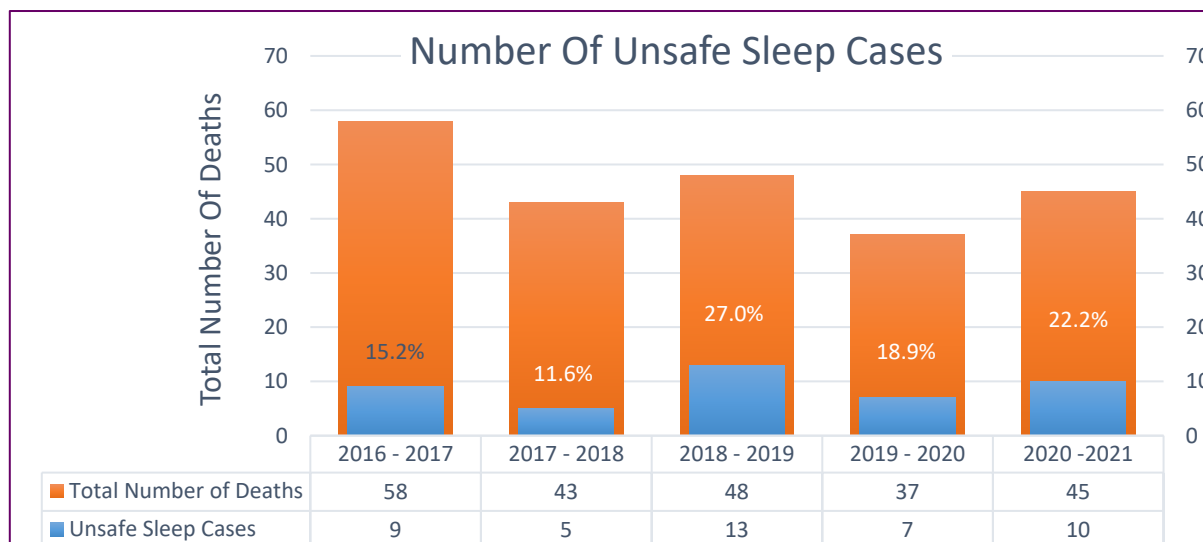


Figure 3: Number of unsafe sleep related cases

## Themes of responses

Out of the 45 unexpected child deaths, 17 were known to Children's Social Care (before death or opened at the time of death due to concerns); 15 were known to or open to mental health services; 8 cases had domestic abuse issues; in 10 of the cases the children's parents admitted to drinking alcohol or taking substances the night before their child died. 10 of the 45 cases have been referred for Child Safeguarding Practice Review (CSPR) consideration.

## Multi-agency working

The Lancashire SUDC nurses are now part of a national network SUDC Nurses/Child Death Review Nurses. The group meet bi-monthly, and they use the forum to discuss roles, themes and trends, preventative strategies, training, child death review processes and the challenges faced in practice. The group is steadily growing in numbers and is attended by nurses and paediatricians from across England.

The SUDC team is involved in numerous ongoing multi-agency work-streams that are related to SUDC cases and public health strategies and the lead nurse continues to attend the Real-Time Surveillance Group and the Suicide Prevention Oversight Group.

## CDOP Priorities for 2020/21

During the forthcoming year CDOP will maintain its current priorities:

1. Deliver the SUDC Prevention group priorities including:
  - a. Maintaining a supply of materials to agencies across pan-Lancashire.
  - b. Support the roll-out of phase 2 of the ICON campaign.
  - c. Ensure the sleep assessment tool is embedded in practice.
  - d. Undertake an evaluation of the safer sleep/grandparents' campaign to ensure it is effective.

- e. Ensure fathers are included in all aspects of antenatal and postnatal care and are made aware of the safer sleeping campaign.
2. Improve the quality and outputs of the child death review processes by:
    - a. Ensuring all child death review meetings (e.g., perinatal mortality; hospital mortality; etc.) inform the CDOP process in a standardised and structured manner.
    - b. Ensure all agencies understand the new guidance and relevant processes.
    - c. Develop and oversee an implementation plan measured against national standards.
    - d. Reduce the variability of reporting forms and routinely missing information e.g., male partners.
    - e. Demonstrate improvements against national standards through self-assessment.
    - f. Evaluate the reporting and governance arrangements and make recommendations to partners as necessary.
    - g. Provide opportunities for continuous professional development e.g., development day.
  3. Maximise the potential of the CDOP Database.
  4. Continue to collect data for Adverse Childhood Experiences (ACEs) and analyse patterns in links between ACEs and child deaths.
  5. Ensure that any preventive strategies and initiatives link with any existing health and wellbeing/ clinical workstreams.
  6. Monitor the delivery of the 7-day SUDC service.
  7. Ensure that the reduction of infant/ child death forms part of integrated multi-agency strategies.
  8. Ensure all agencies and professionals provide input to the processes at the appropriate time.

## Part 2 – Data Analysis

### Deaths that occurred between 1 April 20 and 31 March 21

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 2020 and 31 March 2021 in comparison to the previous year.

The data presented here represents the child deaths that were notified to the Pan-Lancashire Child Death Overview Panel (CDOP) for review.

#### The number of child death notifications

Pan-Lancashire CDOP received 83 notifications of child deaths within Lancashire, Blackburn with Darwen (BwD), and Blackpool, where the child died between 1 April 2020 and 31 March 2021. There are 25 fewer deaths than the previous year. The reduction of deaths is apparent over months where national/regional lockdowns were in place, in response to the COVID-19 pandemic.

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*Figure 1: The number of child death notifications received by Pan-Lancashire CDOP by month of death*

#### Age group and gender

Of the 83 cases notified to Pan-Lancashire CDOP in 2020/21, 53 (64%) of these deaths were in under one year olds, compared to 61% in 2019/20. Over half (53%) of these deaths were in the first 27 days, which presents a stark contrast to the previous year where the number of deaths in children aged between 0-27 days was more than twice that of the number of deaths for children aged between 28 and 364 days.

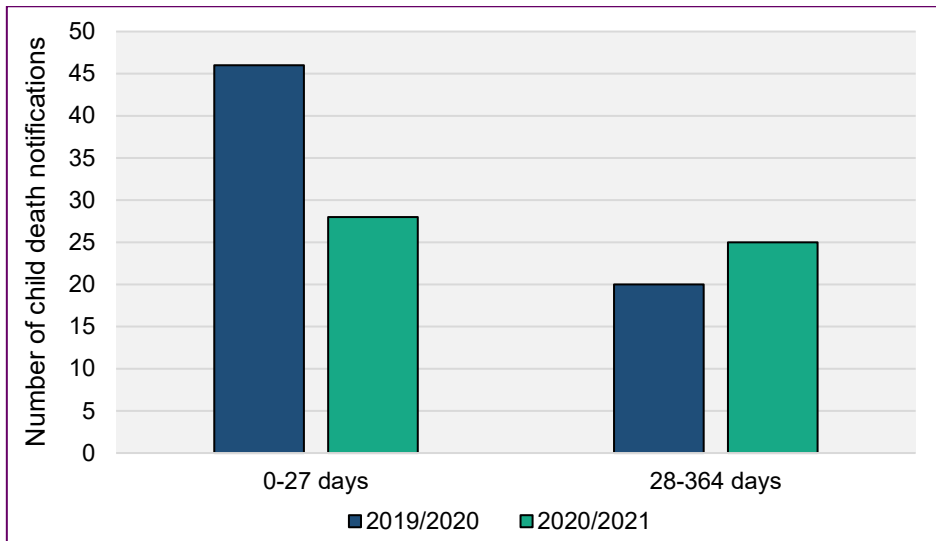


Figure 2: Child death notifications by age group (under 1)

For children aged 1 and over, the highest number of deaths can be seen for children aged between 1-4 years, and 15-17 years. Deaths decreased across most age groups, other than children aged between 1-4 years. The decrease is more apparent in some age groups than others; in particular, the decrease in the number of deaths in children aged between 10-14 years was larger than any other age group.

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Figure 3: Child death notifications by age group (1-17 years)

The number of deaths for males is higher than that of females across all groups, with the largest difference in numbers between male and females in the 0-27 days and 15-17 years age group.

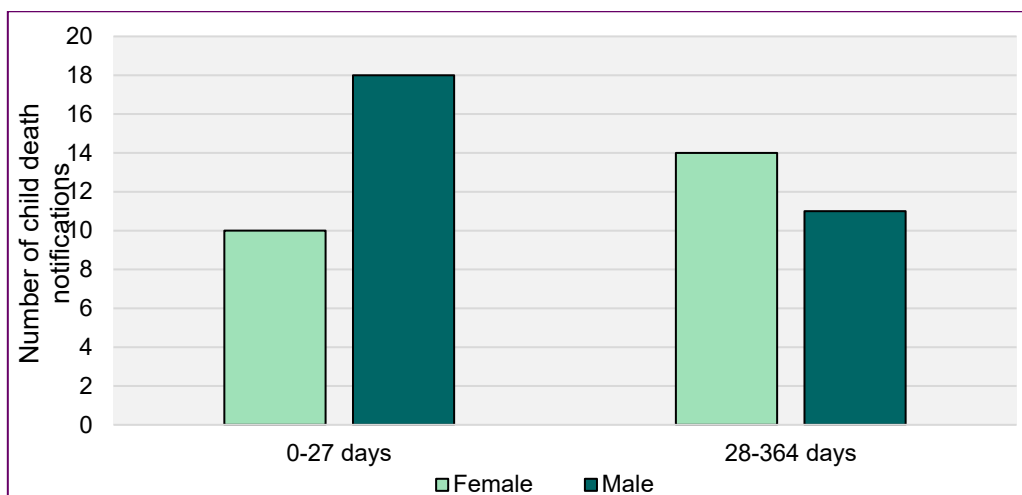


Figure 4: Child death notifications by gender and age group (under 1)

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Figure 5: Child death notifications by gender and age group (1-17 years)

## Social deprivation

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). Each neighbourhood is ranked from most deprived to least deprived deciles, which are then divided into five equal sized groups (quintiles).

The number of deaths of children resident in the most deprived neighbourhoods across Lancashire, BwD, and Blackpool (44 deaths) was more than five times that of children resident in the least deprived neighbourhoods (8 deaths). As shown in *Figure 18* of the reviewed deaths report, this correlates with the higher proportion of children living within the most deprived quintile across Lancashire, BwD, and Blackpool.

Whilst the overall number of deaths were lower in 2020-21, the pattern of more deaths associated with children living in more deprived neighbourhoods remains consistent with previous year's data. The reduction of deaths across the two years was most marked for the less deprived neighbourhoods.



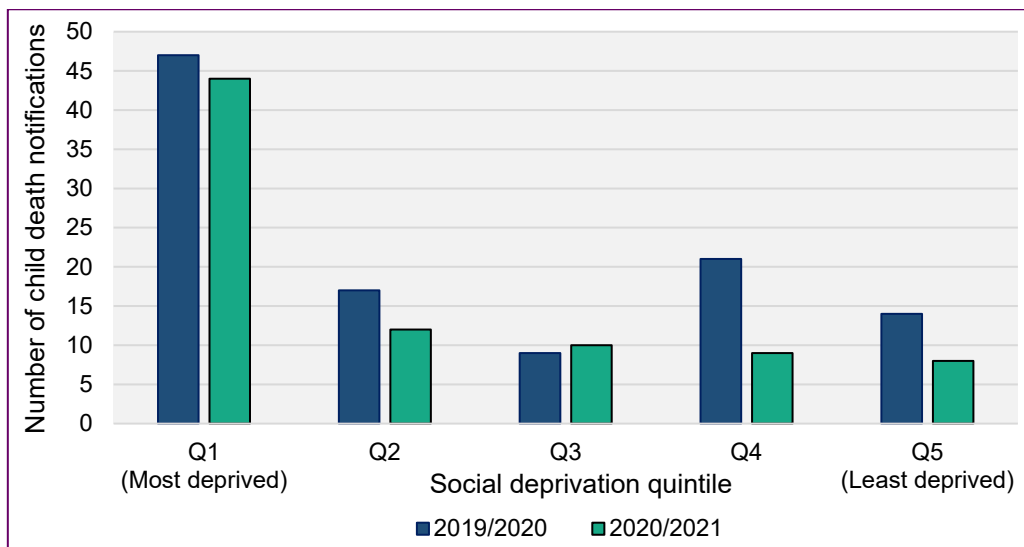


Figure 6: Child death notifications by social deprivation quintile

## Ethnic group

The ethnicity of the child was recorded in 74 (89%) death notifications. Of these, 68% (n=50) of deaths were of children who were recorded as being from a White British ethnic group, 20% (n=15) of deaths were of children from an Asian or Asian British background, 12% (n=9) were from Other ethnic groups (including Black or Black British background, Mixed background and other White backgrounds).

These proportions were similar to the previous year, although a slight increase in deaths is evident in Other ethnic groups (including Black or Black British background, Mixed background and other White backgrounds) compared to the previous year.

It is also important to note that the ethnic group was not recorded for 33% of child deaths notification in 2019/20, compared to 11% in 2020/21. Although this is a marked improvement, national reports recommend Child Death Review professionals, CDOPs and National Child Mortality Database (NCMD) should focus on improving the completeness of ethnicity for **all child deaths** to ensure that the mortality differences by ethnicity can be measured accurately in future years. Improved completeness along with the availability of more reliable population data, will allow for comprehensive analysis on death rates between ethnic groups.

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Figure 7: Child death notifications by ethnic group (where known)

## Place of death

The place of death is defined as where the child is believed to have died irrespective of where the death was confirmed. This was recorded in 99% (n=82) of death notifications. Where the place of death was known, the majority (78%, n=64) of deaths occurred in a hospital trust, consistent with the previous year. Deaths that occurred on neonatal units accounted for 26 (31%) deaths; the largest proportion of deaths across all locations recorded.

Deaths reduced across most places of death in comparison to the previous year. However, there was a marginal increase where the place of death was in a Hospice, and the number of deaths taking place at the child's home, remained the same.

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Figure 8: Child death notifications by place of death (where known)

## Gestational age at birth

Gestational age was recorded in 25 (89%) death notifications of infants. This is a decrease of completed data in comparison to the previous year, where 100% was completed.

Where gestational age was known, 76% (n=19) of infants were born at a premature gestational age (before 37 weeks). There was a decrease in the number of deaths where the infant was born at 22 weeks or later compared to the previous year. No deaths were recorded below 22 weeks which is a notable decrease on the previous year. Due to a reduction in the data completed for gestational age for infants, any interpretation should be **cautious**.

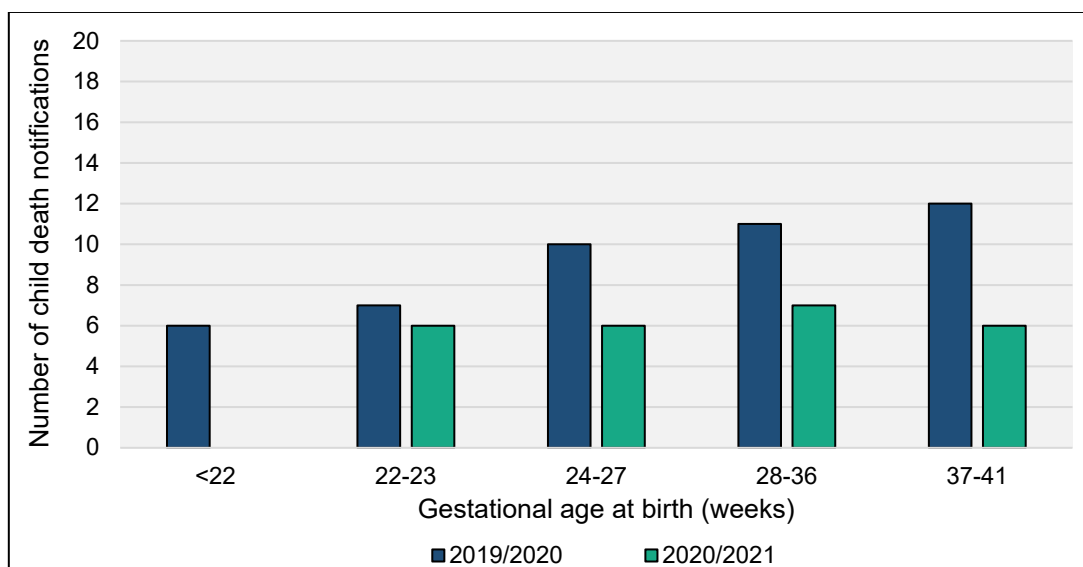


Figure 9: Infant death notifications by gestational age at birth (where known)

## Category of death

Currently data around cause and category of death are confirmed once individual child death cases have been reviewed by the CDOP, which are often some months later. As confirmed by the NCMD, in future years, it will be possible to report on confirmed category of death for each defined year that the deaths have occurred.

Reviews are often performed up to and over one year after the death, and this time can vary depending on the circumstances surrounding the death. A number of factors can contribute to a delay between the death of a child and CDOP review including the time taken to return reporting forms from professionals, the completion of the final post mortem report by the pathologist, undertaking of a coronial or criminal investigation or a Serious Case Review.

## Impact of COVID-19

At present, work around the impact of COVID-19 on child mortality has been performed and reviewed at a national level (<https://doi.org/10.21203/rs.3.rs-689684/v1>).

At a local level, data around exposure to COVID-19 before death were recorded in 40 (48%) death notifications between April 2020 and March 2021. Of these, <5 were recorded as being exposed to Covid-19 (<5 deaths in BwD, <5 in Lancashire). <5 children were aged between 28-364 days, and <5 was aged between 5-9 years.

It is important to note that exposure to COVID-19 was unknown for 51% (n=43) of child deaths notification in 2020/21. As data around COVID-19 exposure before death is incomplete, and case numbers are small, definitive conclusions cannot be reached.

As a direct result of the Covid-19 pandemic and lockdown restrictions, a reduced number of cases were discussed at CDOP meetings between April 2020 and March 2021. All inquests in Lancashire were also suspended until September 2020, which similarly affected the number of cases heard at CDOP meetings. The Panel also highlighted risk factors with NCMD, based on cases heard where delays to treatment/routine operations due to Covid-19 would put vulnerable children at an increased risk and/or exacerbate existing conditions.

## Deaths reviewed between 1 April 20 and 31 March 21

This section of the report presents the number of child death reviews completed by the Pan-Lancashire CDOP between 1 April 2020 and 31 March 2021. It is important to note that the CDOP review of the child death may not be completed in the same year as when the death occurred. Therefore, the population of children reported in Part 1 (CDOP Business Update) partially overlaps but is distinct from the population of children described in this section of the report.

During the year April 2020 – March 2021 (2020/21), 83 child deaths were reported to the Pan-Lancashire child death review team (in accordance with the Working Together to Safeguard Children definition and therefore considered by the pan-Lancashire CDOP). This number is significantly lower than previous years, however this is in line with the reduction of child deaths reported nationally in 2020/21<sup>1</sup>. There is a delay from reporting to reviewing, whilst data and reports from agencies are collated, however the majority of child deaths are reviewed within 12 months.

### The number of child death reviews

In 2020/21, Pan-Lancashire CDOP reviewed 80 child deaths (13 Blackburn with Darwen (BwD) residents, <5 Blackpool residents and 63 Lancashire residents). Of these, 16% (n=13) were reviews of children who died within the same year and 84% (n=67) were reviews where the child died before 1<sup>st</sup> April 2020.

There were 12 (16%) fewer reviews compared to the previous reporting year, likely due to the impact/response to the COVID-19 pandemic, and few deaths occurring.

Overall, 66% of deaths were reviewed within 12 months, which is higher compared to the 2020/21 national figures, where 56% of all deaths were reviewed within 12 months<sup>2</sup>.

Of the 80 reviews completed in 2020/21, 50 were expected deaths, and 30 were unexpected with six reviews classed as unexpected but meeting the exclusion criteria<sup>2</sup>.

The proportion of reviews that identified modifiable factors has remained the same compared to the previous reporting year, with 43% of deaths reviewed during 2020/21 identifying one or more modifiable factors. The proportion of cases identified with modifiable factors has however risen by 8 percentage points since 2015/16 (see *Figure 7*).

### Child Death Reviews by Age

Of the 80 cases reviewed<sup>3</sup>, just under two thirds (64%) of these deaths were in under one year olds, and most were in the first 27 days (as shown in *Figure 1*). This is comparable to other reporting years and the trends seen nationally.

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<sup>1</sup> <https://www.ncmd.info/2021/11/11/child-death-data-release-2021/>

<sup>2</sup> Where a child dies within 24 hours of birth or shortly thereafter **and** has never left hospital **and** there is a clear medical explanation for the death, falls within the exclusion criteria for a Rapid Response. Any death that falls within these criteria is unexpected, but a rapid response is not required.

<sup>3</sup> NB: Due to rounding, some percentage totals may not correspond with the sum of the separate figures

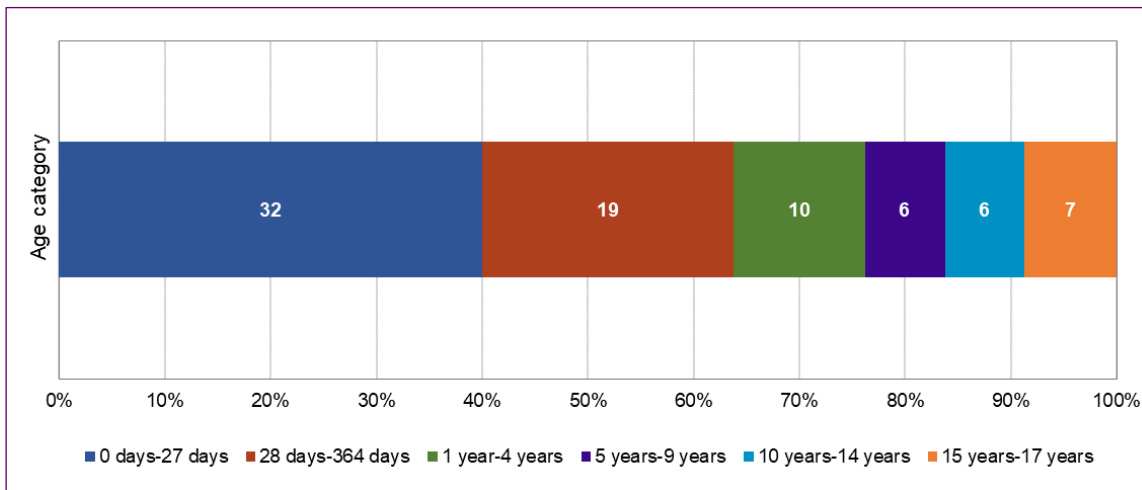


Figure 1: Number & proportion of child deaths reviewed in 2020/21 by the age at death

## Child Death Reviews by Gender

In 2020/21 there was a higher proportion of reviewed death in females (58%) than males (43%) which differs from the national data trends, where the reverse of this is evident. This however is only based on one year of reviews.

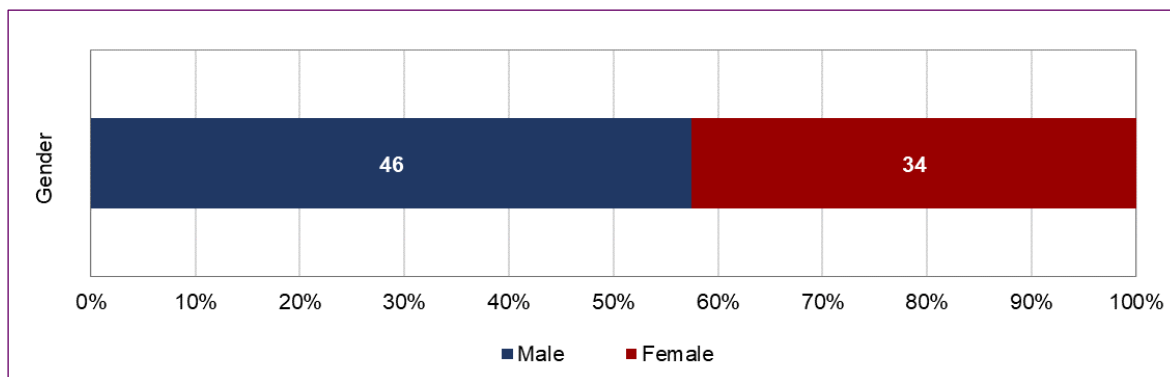


Figure 2: Number & proportion of child deaths reviewed in 2020/21 by gender

## Child Death Reviews by Ethnicity

Of the 80 cases reviewed in 2020/21, 67 (84%) had an ethnicity recorded. Of the 67 cases two thirds were White British (67%) and 15% were of South Asian heritage - including Asian/Asian British Pakistani (9%), Asian/Asian British Indian (<5%), and Asian/Asian British Bangladeshi (<5%)<sup>4</sup>. Other ethnic groups (including other Asian/Arab/White or mixed backgrounds) accounted for 18% of deaths.

All child deaths reviewed for Blackpool (100%) and the majority of child deaths for Lancashire (69%) were of White British ethnicity (as shown in *Figure 3*). Of the Lancashire deaths reviewed 11% were children of South Asian (Asian/Asian British Pakistani (9%), Indian (<5%) or Bangladeshi) heritage. According to the 2011 Census, the 0-17 year old South Asian population for Lancashire is 9% which is slightly over represented in the reviewed child death data.

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<sup>4</sup> NB: Due to rounding, some percentage totals may not correspond with the sum of the separate figures

*Figure 3: Ethnicity of child deaths reviewed in 2020/21 by locality*

Of the BwD deaths reviewed, 44% were of South Asian (Asian/Asian British Pakistani (11%), Indian (22%) or Bangladeshi (11%)) heritage and 44% were White British. When compared to under 18 population for BwD, 55% of children identity as White British and 38% South Asian (Asian/Asian British Pakistani (18%), Indian (17%) or Bangladeshi (<5%) according to 2011 Census. Asian/Asian British Indian are slightly over-represented in the reviewed child death.

As shown in *Figure 4*, trends over time show there has been a proportional decrease of deaths reviewed where the child is of Asian/Asian British Pakistani heritage in BwD, from 17% in 2018/19 to 11% 2019/20, and 8% in 2020/21. However, to note, for a considerable proportion of BwD child deaths reviewed in 2020/21, the ethnicity was either not known or not recorded (31%).

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*Figure 4: Child deaths reviewed in BwD, by ethnicity 2018-2021*

## Category of death

The most common category of death across pan-Lancashire for cases reviewed during 2020/21 was perinatal/neonatal events (30%), with chromosomal, genetic and congenital anomalies accounting for the second most common category of death (28%). This was similarly the case in 2019/20 and correlates to the highest numbers of deaths being in children under one year of age. Since the previous annual report there has been an increase in reviewed deaths categorised as trauma and other external factors (Category 3), acute medical or surgical condition (Category 5), and chronic medical condition (Category 6). No deaths reviewed in 2020/21 were categorised as deliberate inflicted injury, abuse or neglect (Category 1).

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Figure 5: Child deaths reviewed in 2020/21 by category of death as defined by the Department for Education<sup>5</sup>

Figure 6 (below) shows the category of death broken down into year reviewed. As can be seen perinatal/neonatal event (maroon) and chromosomal, genetic and congenital anomalies (dark blue) are by far the largest categories with the other categories of death remaining fairly consistent across the years.

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Figure 6: Category of death by year reviewed 2015-21

## Location of death

The table below highlights that the majority of children die within a hospital setting (72%). This is expected due a large number of the deaths occurring during neonatal and perinatal events, and chromosomal, genetic and congenital anomalies, which require medical support. 18% of children and young people died at home, including children who have end of life care plans in place, as well as children who have died unexpectedly.

Where was child at death	Lancashire	BwD	B'pool	Total
Acute Hospital-Emergency Department	10	<5	<5	14
Acute Hospital-Neonatal Unit	19	<5	<5	24
Acute Hospital-other	11	<5	<5	14
Acute Hospital-Paediatric Intensive Care Unit	8	<5	<5	11
Acute Hospital-Paediatric Ward	<5	<5	<5	<5
Acute Hospital-Midwifery Unity	<5	<5	<5	<5

<sup>5</sup> DfE category of death descriptions can be found in Appendix 1.



Acute Hospital-Labour ward/delivery suite	<5	<5	<5	<5
Home or other private residence	8	<5	<5	9
Public Place	<5	<5	<5	<5
Hospice	<5	<5	<5	<5
All locations total	63	13	<5	80

Table 1: Child deaths reviewed in 2020/21 by the child's local authority and the place where they died

## Expected/Unexpected deaths, 2020/21

Child deaths fall into the two categories of either expected or unexpected. An unexpected death is defined as 'the death of an infant or child which was not anticipated as a significant possibility, for example, 24 hours before the death; or where there was an unexpected collapse or incident leading to or precipitating the events which led to the death'.

Of the 80 cases reviewed, 38% (30 deaths) were unexpected (including 6 deaths which met the exclusion criteria) and 63% (50 deaths) were expected. Trends over time show the number of unexpected deaths over the last two reporting years have reduced, compared to previous years (see Table 6 - trends over time of expected or unexpected child deaths).

## Modifiable Factors

A modifiable factor is defined as "one or more factors, in any domain, which may have contributed to the death of the child and which, by means of locally or nationally achievable interventions, could be modified to reduce the risk of future child deaths" (Working Together, 2015).

As shown in Figure 7, during 2020/21 43% of cases reviewed pan-Lancashire had modifiable factors identified, which remains unchanged compared to the 2019/20 reporting year.

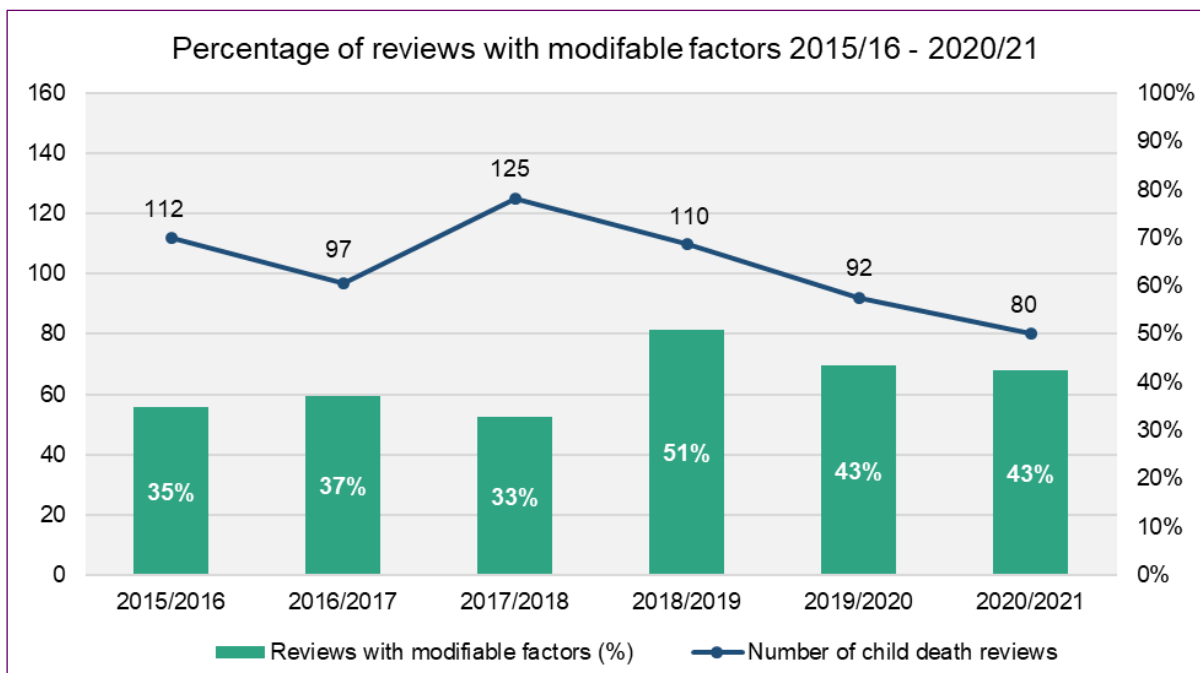


Figure 7: The number of child death reviews completed by Pan-Lancashire Child Death Overview Panels and the proportion of cases with modifiable factors identified, by year of review

Table 2 below presents the number of deaths reviewed in 2020/21 by the child's local authority and whether the deaths were expected or unexpected, and had modifiable and non-modifiable factors identified.

Local Authority	Expected Deaths		Unexpected Deaths (including unexpected meets exclusion criteria)		Total
	Modifiable Factors	No Modifiable Factors	Modifiable Factors	No Modifiable Factors	
BwD	<5	7	<5	<5	13
Blackpool	<5	<5	<5	<5	<5
Lancashire	12	25	16	10	63
Total	16	34	18	12	80

Table 2 – Total number of deaths reviewed in 2020/21 by expected/unexpected and whether modifiable factors were identified

The most common modifiable factors identified in 2020/21 across pan-Lancashire were smoking by parent/carer in the household (44%) and safer sleep (29%) (including co-sleeping, temperature of room and unsafe sleeping arrangements).

When analysing the data by local authority area smoking and safer sleep remain the highest modifiable factors for both Lancashire and Blackpool. However, of the <5 BwD cases deemed to have modifiable factors, smoking and raised BMI was identified in <5 of the cases. Where such small numbers are involved, modifiable factors should be treated with caution. For further analysis on modifiable factors over a six year period please see pages 34-37 below.

### Category of death and Modifiable Factors

The largest category of deaths Pan-Lancashire in 2020/21 with modifiable factors was Category 8: perinatal/neonatal events (41%). The second largest category to have modifiable factors was Category 3: trauma and other external factors (18%).

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Figure 8: Category of the child's death as defined by the Department for Education and whether modifiable factors were identified in reviews completed between April 2020 and March 2021

### Category of death by local authority and modifiable factor

As previously mentioned, the most common category of death to have been deemed to have modifiable factors across Pan-Lancashire is perinatal/neonatal events and this is evident in the BwD and Lancashire figures (as shown in Table 3). Due to such small modifiable factors being identified in

Blackpool, a common category could not be identified. The second most common category of death across Pan-Lancashire was trauma and other external factors. However, it should be noted that 5 of these were Lancashire deaths. As these numbers are so small they should be treated with caution.

Category	Modifiable Factors			
	BwD	Blackpool	Lancashire	Pan-Lancashire Total
Category 1 (deliberately inflicted injury, abuse or neglect)	<5	<5	<5	<5
Category 2 (suicide or deliberate self-inflicted harm)	<5	<5	<5	<5
Category 3 (trauma and other external factors)	<5	<5	5	6
Category 4 (malignancy)	<5	<5	<5	<5
Category 5 (acute medical or surgical condition)	<5	<5	<5	<5
Category 6 (chronic medical condition)	<5	<5	<5	<5
Category 7 (chromosomal, genetic and congenital anomalies)	<5	<5	<5	<5
Category 8 (perinatal/ neonatal event)	<5	<5	12	14
Category 9 (infection)	<5	<5	<5	<5
Category 10 (sudden unexpected and unexplained death)	<5	<5	<5	<5
Grand Total	<5	<5	28	34

Table 3: Category of death by local authority and modifiable factor in 2020/21

### Length of time to complete the review

Of the 80 reviews completed by the Pan-Lancashire CDOP, 13 (16%) reviews were of children who died between 1 April 2020 and 31 March 2021, while 67 (84%) reviews were of children who died in previous years.

11 (14%) reviews were finalised within 6 months of the child's death, while 52 (66%) were finalised within 12 months of the child's death. A further breakdown by local authority is provided in *Figures 9-11*, which show 43 (68%) reviews were completed within 12 months of the child's death in Lancashire, 9 (69%) in Blackburn with Darwen and <5 (25%) in Blackpool. Although a small numbers are involved, a larger proportion of reviews in Blackpool (75% n=3), took longer than 12 months to complete. This was due to reporting delays, as well as one case linked to a Serious Case Review (SCR). The overall proportion of reviews completed within 12 months by Pan-Lancashire CDOP is similar to the national average (67%) for 2020/21.

The 27 (34%) reviews that took over 12 months to complete presented the highest proportion of reviews where modifiable factors were identified (53%), compared to 15% for reviews taking under 6 months. There are a number of factors that may contribute to a longer length of time between the death of a child and CDOP review, for example; the return of reporting forms, the receipt of the final post mortem report, undertaking of a criminal investigation or a Child Safeguarding Practice Review, and receipt of the final report from the local child death review meeting. In addition, on occasion

when the outcome of a Coroner's inquest is awaited, there may be a longer delay before a case can be reviewed by the CDOP.

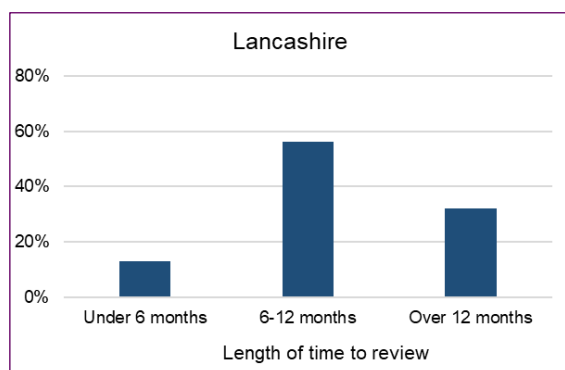


Figure 9: Time taken to complete reviews, Lancashire

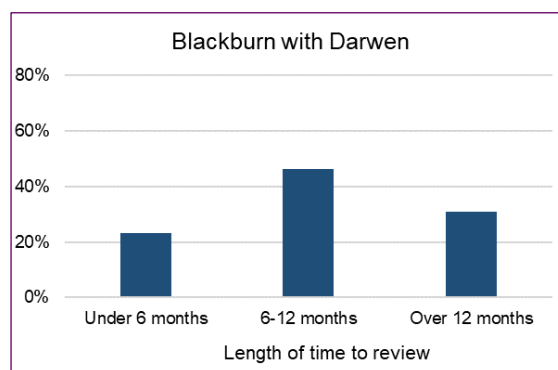


Figure 10: Time taken to complete reviews, BwD

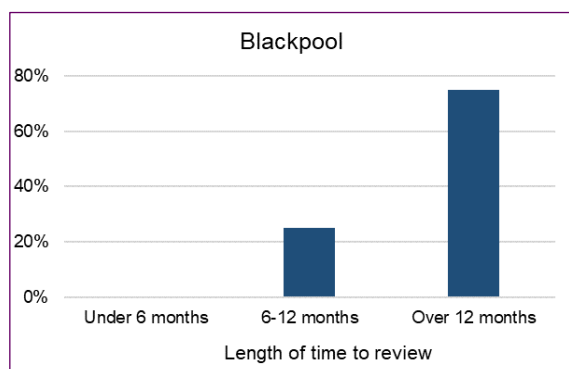


Figure 11: Time taken to complete reviews, Blackpool

## Deaths reviewed between 1 April 2015 and 31 March 2021

This section of the report will look at aggregated child death data of the cases reviewed by the panel over the past six reporting years (2015-2021). It should be noted that previous annual reports have considered deaths reviewed since 2008 up to the current reporting year. However, it was agreed by CDOP members for this annual report to look at a smaller cohort of numbers.

Since 2015 the Panel have reviewed 616 cases and of these 103 were BwD residents, 58 were Blackpool residents and 455 were Lancashire residents.

The table below provides the local figures for deaths deemed to be expected/ unexpected, modifiable/non-modifiable and a break down by gender.

	BwD	Blackpool	Lancashire	Pan-Lancashire	National
Female	44 (43%)	21 (36%)	215 (47%)	280 (45%)	1120 (43%)
Male	59 (57%)	37 (64%)	240(53%)	336 (55%)	1440 (56%)
Unknown/ Indeterminate					15 (1%)
Expected	64 (63%)	29 (50%)	264 (58%)	357 (58%)	Not reported
Unexpected	39 (38%)	29 (50%)	191 (42%)	259 (42%)	Not reported
Modifiable	30 (29%)	31 (53%)	185 (41%)	246 (40%)	882 (34%)
Not Modifiable	72 (70%)	27 (47%)	269 (59%)	368 (60%)	1693 (66%)
Insufficient info	<5		<5	<5	

Table 4: Comparison of local data (2015-2021) with national figures for 2020/21

As can be seen BwD and Lancashire had more expected deaths (63% BwD and 58% Lancashire), whereas in Blackpool has an equal proportion of expected deaths (50%) and unexpected.

When comparing the differences in gender it can be seen that there are more male deaths across pan-Lancashire which is a trend seen nationally. It should be noted that Blackpool is above the national average in male deaths.

## Causes of death, 2015/16 – 2020/21

As part of the CDOP review process each case is classified with a cause of death, which is assigned from ten nationally defined categories<sup>6</sup>. Of the 616 deaths reviewed over the last 6 years, the most common causes of death out of all the reviewed cases were chromosomal, genetic and congenital anomalies (Category 7) and perinatal/neonatal events (Category 8), which accounted for 58% of all reviewed deaths:

- 29% (181) of deaths were categorised as chromosomal, genetic and congenital anomalies (Category 7)
- 29% (177) of deaths were categorised as perinatal/neonatal events (Category 8)
- 42% (258) of deaths fell into other categories

The proportion of deaths attributable to chromosomal, genetic and congenital anomalies (Category 7) is higher across pan-Lancashire (29%) than nationally (24%)<sup>7</sup>.

A further breakdown in Table 5 provides the proportion of reviewed deaths by category across localities, and allows comparisons to be made to the latest national figures for 2020/21.

Proportion of reviewed deaths by category of death		2015/16 - 2020/21				2020/21
		BwD	Blackpool	Lancashire	Pan-Lancs	National
<b>Cat 1:</b>	Deliberately inflicted injury, abuse or neglect	<5%	9%	<5%	<5%	<5%
<b>Cat 2:</b>	Suicide or deliberate self-inflicted harm	<5%	<5%	<5%	<5%	<5%
<b>Cat 3:</b>	Trauma and other external factors	<5%	9%	<5%	5%	5%
<b>Cat 4:</b>	Malignancy	8%	<5%	7%	7%	9%
<b>Cat 5:</b>	Acute medical or surgical condition	8%	<5%	7%	6%	5%
<b>Cat 6:</b>	Chronic medical condition	5%	<5%	<5%	<5%	5%
<b>Cat 7:</b>	Chromosomal, genetic and congenital anomalies	39%	21%	28%	29%	24%
<b>Cat 8:</b>	Perinatal/ neonatal event	20%	34%	30%	29%	33%
<b>Cat 9:</b>	Infection	7%	7%	6%	6%	5%
<b>Cat 10:</b>	Sudden unexpected, unexplained death	6%	9%	9%	8%	8%

Table 5: Comparison of local data (2015-2021) with national figures for 2020/21

## Cause of death by age, 2015/16 – 2020/21

<sup>6</sup> See Appendix 1 for ten categories used to classify cause of death

<sup>7</sup> <https://www.ncmd.info/2021/11/11/child-death-data-release-2021/>

As shown in *Figure 12*, a higher proportion (42%) of infant deaths (under 1 year olds) were due to perinatal/neonatal events (Category 8) and chromosomal, genetic and congenital anomalies (Category 7) (32%). For 1-17 year olds, the highest proportion of deaths were due to chromosomal, genetic and congenital anomalies (Category 7) (25%), and malignancy (Category 4) (16%).

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*Figure 12: Proportion of reviewed deaths in each category of death by age, 2015/16-2020/21*

When comparing the latest 3 years, to the previous 3 years, overall numbers and proportions of deaths are reducing except for Category 8, Category 3, and Category 1 in under 1 year olds (*Figures 13, and 14*), and Category 2, 4, 6, 9, and 10 in 1-17 year olds (*Figures 15 and 16*).

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*Figure 13: Number of reviewed infant deaths (under 1-year olds) in each category of death, 2015/16-2017/18 compared to 2018/19-2020/21*

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*Figure 14: Proportion of reviewed infant deaths (under 1-year olds) in each category of death, 2015/16-2017/18 compared to 2018/19-2020/21*

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Figure 15: Numbers of reviewed child deaths (1–17-year-olds) in each category of death, 2015/16–2017/18 compared to 2018/19–2020/21

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Figure 16: Proportion of reviewed child deaths (1–17-year-olds) in each category of death, 2015/16–2017/18 compared to 2018/19–2020/21

### Cause of death by local authority and age, 2015/16 – 2020/21

Table 5 below, shows the category of child deaths by age with a breakdown by local authority for comparison. As is most evident, the majority of deaths occur in children under one year due to a perinatal/neonatal event (Category 8) with chromosomal, genetic and congenital anomalies (Category 7) accounting for the second most common category in Lancashire, and Blackpool. This also correlates with the trends seen for Pan-Lancashire (Figure 12).

In BwD however, the reverse of this is evident with the majority of infant deaths occurring due chromosomal, genetic and congenital anomalies (Category 7), followed secondly by perinatal/neonatal events (Category 8). This also correlates to there being more expected deaths and the reason why the genetic counselling service within BwD and East Lancashire continues to support families of affected children. CDOP remains in regular contact with the service to assess whether families have been offered counselling and to also refer cases into the service.

	Lancashire		Blackburn with Darwen		Blackpool	
	Under 1 year	1-17 years	Under 1 year	1-17 years	Under 1 year	1-17 years
Category 1 (deliberately inflicted injury, abuse or neglect)	6 (<5%)	<5 (2%)		<5 (<5%)	<5 (7%)	<5 (15%)
Category 2 (suicide or deliberate self-inflicted harm)		16 (9%)		<5 (8%)		<5 (23%)
Category 3 (trauma and other external factors)	6 (2%)	18 (10%)	<5 (<5%)	<5 (5%)	<5 (7%)	<5 (15%)
Category 4 (malignancy)	<5 (<5%)	29 (16%)	<5 (<5%)	7 (18%)		<5 (15%)



Category 5 (acute medical or surgical condition)	9 (3%)	21 (12%)		8 (20%)		<5 (8%)
Category 6 (chronic medical condition)	<5 (<5%)	6 (<5%)	<5 (<5%)	<5 (10%)	<5 (<5%)	
Category 7 (chromosomal, genetic and congenital anomalies)	81 (29%)	48 (27%)	30 (48%)	10 (25%)	12 (27%)	
Category 8 (perinatal/ neonatal event)	122 (44%)	14 (8%)	21 (33%)		19 (42%)	<5 (8%)
Category 9 (infection)	14 (5%)	15 (8%)	<5 (5%)	<5 (10%)	<5 (7%)	<5 (8%)
Category 10 (sudden unexpected and unexplained death)	34 (12%)	7 (<5%)	5 (8%)	<5 (<5%)	<5 (9%)	<5 (8%)
TOTAL	277 (100%)	178 (100%)	63 (100%)	40 (100%)	45 (100%)	13 (100%)

Table 6: Cause of death by age and local authority (2015-2021)

## Child deaths by deprivation, 2015/16 – 2020/21

As shown in *Figure 17* below, the child population of Lancashire in the five deprivation quintiles as defined by the Index of Multiple Deprivation (IMD 2019). Quintile 1 (Q1) is the most deprived and quintile 5 (Q5) is the least deprived. Lancashire and pan-Lancashire are fairly similar, however BwD and Blackpool have significantly higher numbers of children in Q1.

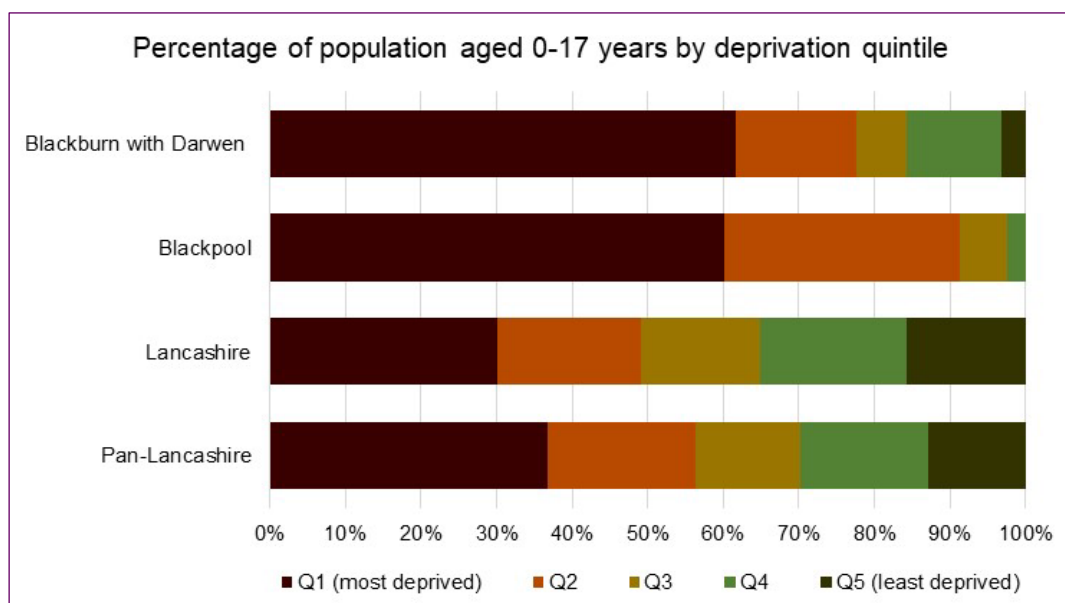


Figure 17: Proportion of child population (0–17-year-olds) by deprivation quintile 2015/16-2020/21

*Figure 18* shows the proportion of reviewed child deaths (aged 0-17) by deprivation quintile. As can be seen, BwD, Blackpool, Lancashire and pan-Lancashire have a disproportionate amount of deaths in the most deprived areas (Q1), compared to the child populations in Q1. The correlation of a larger proportion of deaths being associated with children living in more deprived neighbourhoods remains consistent with previous year's data and the national picture.

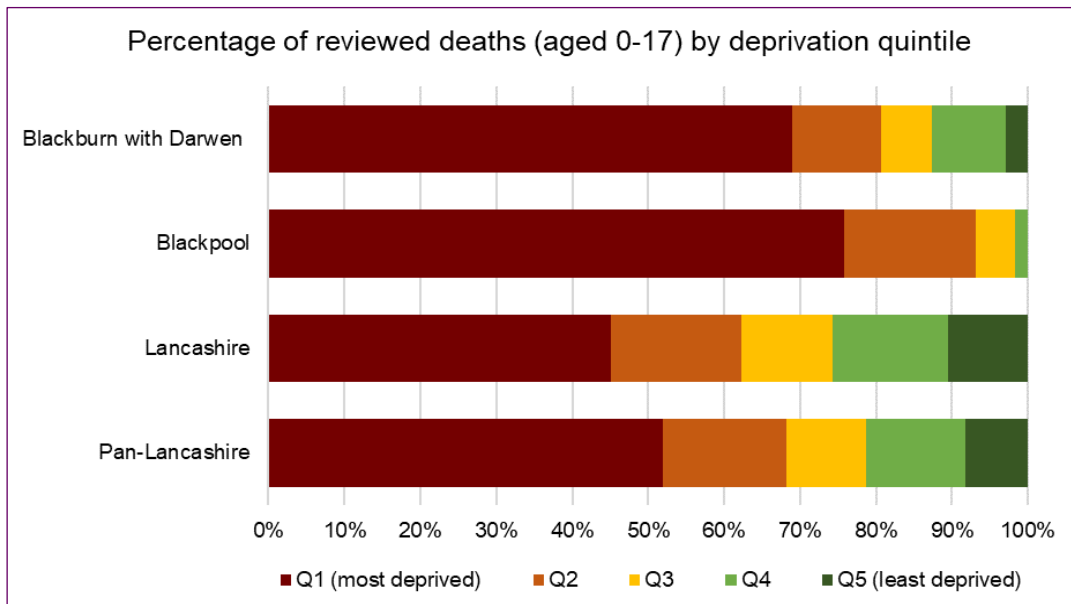


Figure 18: Proportion of reviewed deaths (0–17-year-olds) by deprivation quintile 2015/16–2020/21

As shown in Figure 19, the proportion of reviewed child deaths (aged 0-17) by deprivation quintile, when analysed by categories of deaths across Pan-Lancashire, similarly highlights a disproportionate amount of deaths in the most deprived areas (Q1), compared to the child populations in Q1, across all categories. An additional outlier amongst this is highlighted amongst Category 2 (suicide or deliberate self-inflicted harm) deaths, which indicates a disproportionate amount of deaths in Q4, compared to the child populations in this quintile.

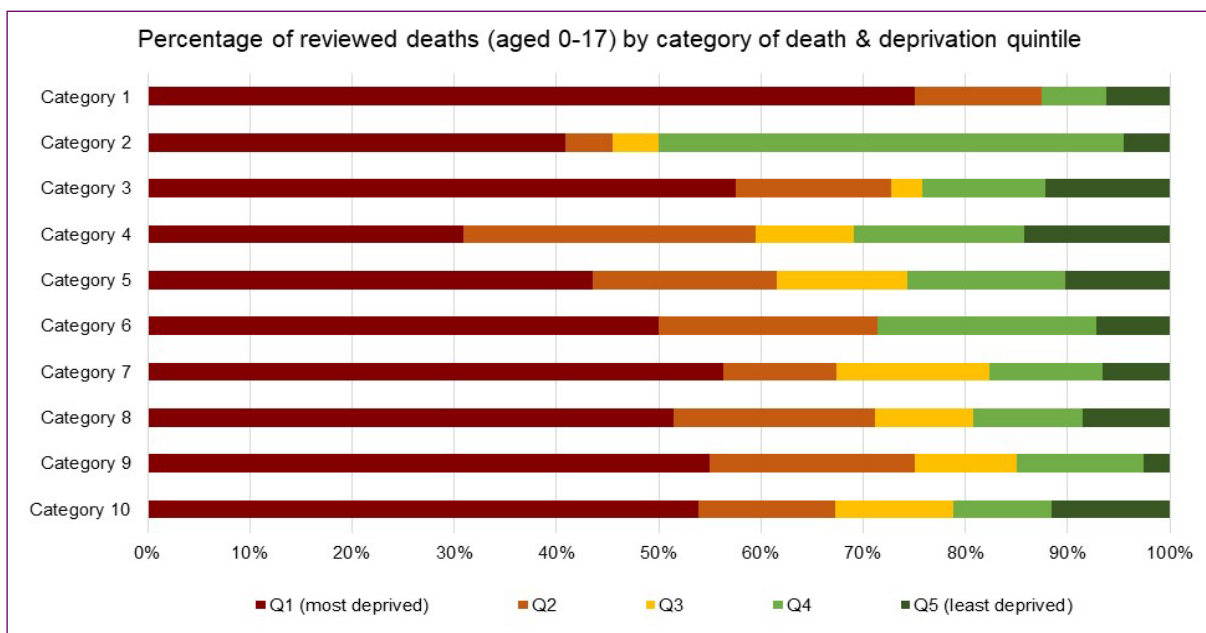


Figure 19: Proportion of reviewed deaths in each category by deprivation quintile 2015/16–2020/21

## Deaths by ethnicity

Of the 616 child deaths reviewed by the panel between April 2015 and March 2021, 555 (90%) had an ethnicity recorded. Of the 555 cases over two thirds (69%) were White British and 19% were of South Asian heritage – which includes Asian/Asian British Pakistani (13%), Asian/Asian British Indian (<5%), and Asian/Asian British Bangladeshi (<5%)<sup>8</sup> ethnicities. Other ethnic groups (including other

<sup>8</sup> NB: Due to rounding, some percentage totals may not correspond with the sum of the separate figures

Asian/Arab/White backgrounds) accounted for 9% of deaths, <5% were of mixed ethnicities, and <5% were of Black/African/Caribbean ethnicity.

As has been seen in previous annual reports there are a disproportionate number of child deaths in the Asian Pakistani ethnic group compared to the proportion of this ethnic group within the community. Pakistani children aged 0-17 make up only 7% of the overall 0-17 population across pan-Lancashire, though account for 13% of the deaths, where ethnicity is known.

Figure 20 below shows the proportion of deaths by broad ethnic group and category of death.

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Figure 20: Proportion of deaths in each category by broad ethnic group (where known)

Figure 21 shows the breakdown of deaths by White and All other ethnic groups by the districts within Lancashire-14. It can clearly be seen that Blackburn with Darwen and Preston has the highest number of child deaths. These two districts also have a high proportions of child deaths in BME communities than the Lancashire average. There were 172 (31%) child deaths in Blackburn with Darwen and Preston combined; of which 75 (44%) were from non-White ethnic groups. This is significantly higher than Lancashire-14, where 27% were from non-white ethnic groups. While no other district had proportions significantly higher than the Lancashire-14 average, Blackpool, Ribble Valley West Lancashire, South-Ribble, and Wyre had much lower numbers of deaths in BME groups.

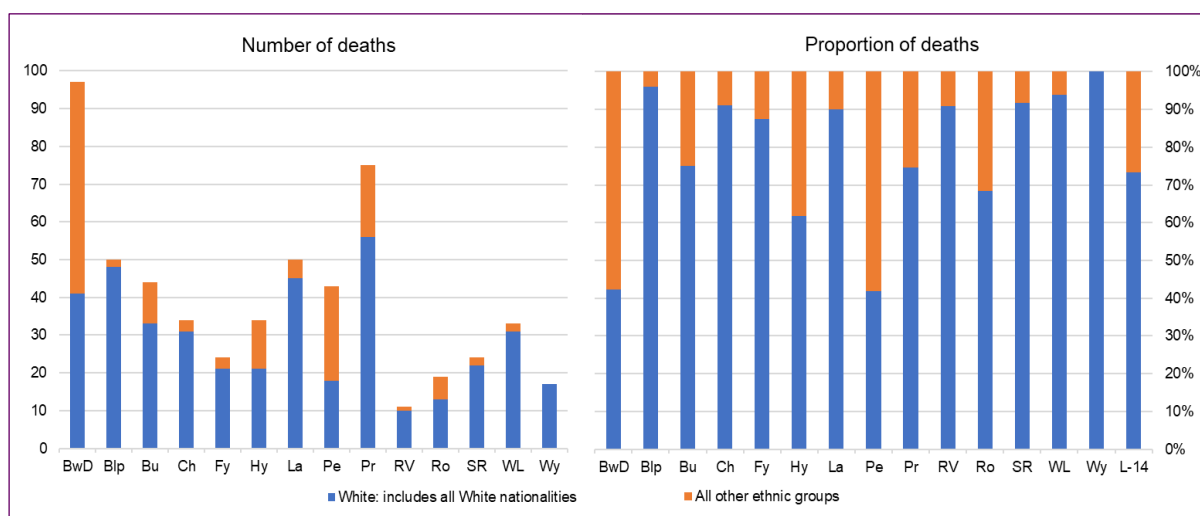


Figure 21: Number & proportion of deaths in 2015-2021, by district and ethnic group (where known)

## Expected and unexpected deaths

Deaths are grouped into expected and unexpected. Expected deaths may include cases where a medical condition, known to doctors was the cause of death. Unexpected deaths included cases which could not have been predicted or expected e.g. due to road traffic collision or sudden infant death.

Of the 616 cases reviewed in between April 2015 and March 2021, 42% (259) were unexpected deaths and 58% (357) were expected. A higher proportion of the unexpected deaths are attributable to the following categories:

Category 3 (trauma and other external factors)

Category 5 (acute medical or surgical condition)

Category 7 (chromosomal, genetic and congenital anomalies)

Category 8 (perinatal/ neonatal event)

Category 9 (infection)

Category 10 (sudden unexpected and unexplained death).

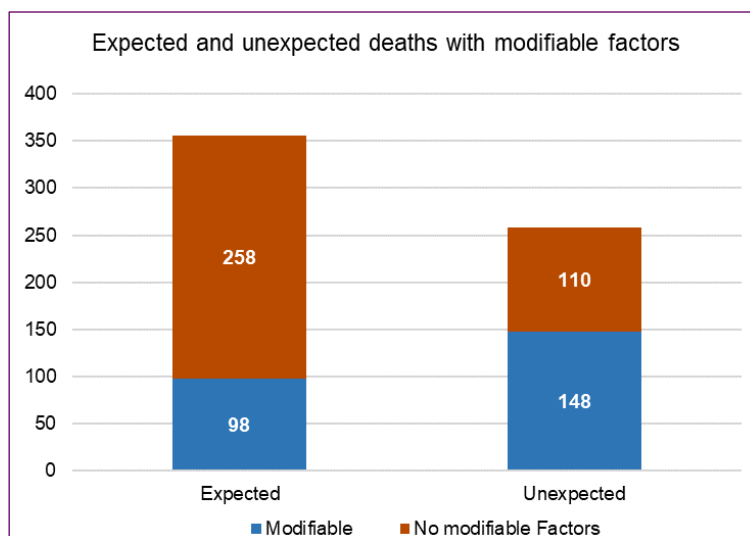
Trends over time show the proportion of expected and unexpected remained largely unchanged between 2015/16 and 2018/19. In the last two reporting years however, the number and proportion of unexpected deaths have fallen (as shown in *Table 7* below).

	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	Total
Expected	54%	58%	54%	53%	70%	63%	58%
Unexpected	46%	42%	46%	47%	30%	38%	42%
Grand Total	100%	100%	100%	100%	100%	100%	100%

*Table 7: Trends over time of expected and unexpected deaths, 2015-2021*

## Expected and unexpected deaths with modifiable factors

As shown in *Figure 22*, modifiable factors tend to occur more in unexpected deaths. A further breakdown of modifiable factors by category of death is shown in *Table 8*.



*Figure 22: Expected & unexpected deaths with modifiable factors, 2015-2021*

The data shown below is based on the number of deaths reviewed between April 2015 and March 2021 and is broken down into Local Authority area and category of death. When reviewing this chart caution must be observed when considering small numbers.

As shown, across all areas a larger number of deaths with modifiable factors are attributed to 'medical' categories<sup>9</sup> in comparison to the non-medical categories of death.

63% of deaths reviewed and categorised as sudden, unexpected, unexplained deaths within pan-Lancashire have been identified to have the most modifiable factor and this is in line with the national data.

Lancashire				
Category of death	Modifiable factor	No modifiable factor	Insufficient information	Grand Total
Medical (4,5,6,7,8,9)	116	247	<5	364
Sudden, unexpected, unexplained (10)	29	12	<5	41
Trauma and other external factors (3)	19	5	<5	24
Suicide or deliberate self-inflicted harm (2)	12	<5	<5	16
Deliberately inflicted injury, abuse or neglect (1)	9	<5	<5	10
Grand Total	185	269	<%	455
Blackburn with Darwen				
Category of death	Modifiable factor	No modifiable factor	Insufficient information	Grand Total
Medical (4,5,6,7,8,9)	19	69	<5	89
Sudden, unexpected, unexplained (10)	4	<5	<5	6
Trauma and other external factors (3)	3	<5	<5	<5
Suicide or deliberate self-inflicted harm (2)	<5	<5	<5	<5
Deliberately inflicted injury, abuse or neglect (1)	<5	<5	<5	<5
Grand Total	30	72	<5	103
Blackpool				
Category of death	Modifiable factor	No modifiable factor	Insufficient information	Grand Total
Medical (4,5,6,7,8,9)	14	26	<5	40
Sudden, unexpected, unexplained (10)	<5	<5	<5	5

<sup>9</sup> The medical category of death includes perinatal/ neonatal event; chromosomal, genetic and congenital abnormalities; infection; malignancy; acute medical or surgical condition and chronic medical conditions.

Trauma and other external factors (3)	5	<5	<5	5
Suicide or deliberate self-inflicted harm (2)	<5	<5	<5	<5
Deliberately inflicted injury, abuse or neglect (1)	5	<5	<5	5
Grand Total	31	27	<5	58

Table 8: Category of death by modifiable factor, 2015-2021

Figure 23 (below) illustrates the proportion of deaths with modifiable factors, by category of death. 246 (40%) deaths were identified to have modifiable factors. Of these deaths:

The highest proportion of cases with modifiable factors were attributed to perinatal/ neonatal events (BwD – 30%, Blackpool – 29%, Lancashire – 42%)

BwD and Blackpool had 13% of deaths due to sudden, unexpected, unexplained causes were deemed modifiable, compared to 16% in Lancashire.

Blackpool had an equal proportion of modifiable deaths (16%) due to deliberately inflicted injury, abuse or neglect, and trauma and other external factors.

A similar proportional breakdown can be seen for Pan-Lancashire when compared to the Lancashire (12) column:

- 39% of modifiable deaths were caused by perinatal/ neonatal events
- 15% were sudden unexpected, unexplained deaths
- 11% were due to trauma and other external factors.

Examples of modifiable factors relating to perinatal/ neonatal events, sudden unexpected, unexplained deaths and trauma and other external factors include smoking by someone in the household or smoking in pregnancy, issues relating to safer sleep and risk-taking behaviours.

Figure removed to maintain confidentiality

Figure 23: Expected & unexpected deaths with modifiable factors, 2015-2021

## Most common modifiable factor

Of the cases reviewed by the Pan-Lancs CDOP from 2015-2021 smoking, safer sleep, alcohol/substance misuse by parent/carer and service provision were identified as the most common modifiable factors across pan-Lancashire. A breakdown of the most common factors by area can be seen in *Table 9* below. As mentioned previously, modifiable factors identified by the panel have increased year on year. This list is not exhaustive and only the most common modifiable factors have been identified.

Lancashire	BwD	Blackpool	Pan-Lancashire
Smoking (92)	Smoking (13)	Smoking (15)	Smoking (120)
Domestic Abuse/Violence (54)	Alcohol/substance misuse in parent/carer (7)	Alcohol/substance misuse in parent/carer (10)	Alcohol/substance misuse in parent/carer (69)
Alcohol/substance misuse in parent/carer (52)	BMI (7)	Domestic Abuse/Violence (9)	Domestic Abuse/Violence (67)
Safer Sleep (34)	Mental Health (5)	Safer Sleep (6)	Safer Sleep (42)
BMI (32)	Service Provision (5)	Service Provision (6)	BMI (39)

*Table 9: Most common modifiable factor 2015-2021*

## Summary of key points and identification of themes and trends

All data reported within this section is based on child deaths reviewed between April 2015 and March 2021, unless otherwise stated.

### Blackburn with Darwen

69% of deaths reviewed during 2020/21 were completed within 12 months of the child's death, compared to 78% in the previous year.

44% of deaths reviewed in 2020/21 were of South Asian heritage (Asian/Asian British Pakistani (11%), Indian (22%) or Bangladeshi (11%)), which appears dis-proportionately high compared with the 0-17 child population in 2011 census.

54% of deaths reviewed in 2020/21 were Male.

62% of deaths reviewed were of children under 1 year of age (46% under 28 days and 15% aged 28 – 364 days).

77% of deaths reviewed in 2020/21 were expected, and 23% were unexpected.

46% of deaths reviewed in 2020/21 were due to chromosomal, genetic and congenital anomalies and 23% were due to perinatal/neonatal events

31% of deaths reviewed in 2020/21 had modifiable factors.

The most common modifiable factors identified between April 2015 and March 2021 were smoking, alcohol/substance misuse in parent/carer, high BMI, mental health, and service provision.



## **Blackpool**

25% of deaths reviewed during 2020/21 were completed within 12 months of the child's death, compared to 71% in the previous year.

100% of deaths reviewed in 2020/21 were of White British ethnicity.

75% of deaths reviewed in 2020/21 were female.

25% of deaths reviewed in 2020/21 were unexpected.

100% of deaths reviewed in 2020/21 were children aged under 1 year old (25% under 28 days and 75% 28 – 364 days).

50% of deaths reviewed in 2020/21 were due to chromosomal, genetic and congenital anomalies, 25% were due to trauma and other external factors, and 25% due to chronic medical condition.

50% of deaths reviewed in 2020/21 had modifiable factors.

The most common modifiable factors identified between April 2015 and March 2021 are smoking, alcohol/substance misuse in parent/carer, domestic abuse/violence, safer sleep, and service provision.

## **Lancashire**

68% of deaths reviewed during 2020/21 were completed within 12 months of the child's death, compared to 78% in the previous year.

11% of deaths reviewed in 2020/21 were of children from a South Asian heritage (Asian/Asian British Pakistani (9%), Indian (<5%) or Bangladeshi), which appears disproportionately represented compared with the 0-17 child population of 9%, as indicated in the 2011 census.

59% of deaths reviewed in 2020/21 were female.

Of the deaths reviewed in 2020/21, 62% of children were aged under 1 year old (40% under 28 days and 22% 28 – 364 days).

33% of deaths reviewed in 2020/21 were due to perinatal/ neonatal events and 22% were due to chromosomal/congenital abnormalities.

43% of deaths identified have modifiable factors.

Of the 44% of deaths identified to have modifiable factors in 2020/21 the most common category of death was Category 8: perinatal neonatal events (43%). The second largest category to have modifiable factors was Category 3: trauma and other external factors (18%).

The most common modifiable factors identified between April 2015 and March 2021 are smoking, domestic abuse/violence, alcohol/substance misuse in parent/carer, safer sleep, and high or low BMI.

## **Pan-Lancashire**

66% of cases reviewed by the pan-Lancashire CDOP during 2020/21 were completed within 12 months of the child deaths, compared to 77% in 2019/20.

64% of child deaths reviewed in 2020/21 are of children under 1 year old (40% under 28 days and 24% aged 28-374 days)

58% of pan-Lancashire deaths reviewed in 2020/21 were female

From the cases reviewed in 2020/21, the two largest ethnicities are White British (67%) and South Asian (Asian/Asian British Pakistani (9%), Asian/Asian British Indian (<5%), and Asian/Asian British Bangladeshi (<5%).

Of the cases reviewed in 2020/21, perinatal and neonatal events (30%) and chromosomal, genetic and congenital anomalies (28%) are the most common categories of death

43% of deaths reviewed in 2020/21 had modifiable factors identified

Of the cases identified to have modifiable factors in 2020/21 the most common categories of death are perinatal/ neonatal events (39%), sudden unexpected, unexplained deaths (15%) and trauma and other external factors (11%)

The most common modifiable factors identified between April 2015 and March 2021 are smoking, alcohol/substance misuse in parent/carer, domestic abuse/violence, safer sleep, and high or low BMI.

## Recommendations for 2021/22

- A review of the modifiable factors and actions/response to these to be integrated into existing work-streams across the PH team and with core partners.
- For each (upper tier) locality area to have an Infant Mortality Strategy and Action Plan with an identified Group that leads, or it reports to, which is then accountable to the appropriate Health and Wellbeing Board. To be developed over the next 12 months.
- Annual/6 monthly validation checks of CDOP data (carried out by an analyst) to minimise discrepancies prior to the production of routine annual CDOP analysis/reports.
- Ensure data is recorded/captured around genetic condition type (X-linked/autosomal recessive/autosomal dominant etc) where possible for Category 7 deaths (chromosomal, genetic and congenital anomalies) – currently not routinely or consistently recorded as part of the CDOP dataset. This would be a useful addition going forward, both to inform CDOP and the recently formed Genetics steering group.
- To continuously improve data completeness, partners must ensure all professionals providing information to CDOP complete the forms as fully as possible before they are submitted. Improving this data will enable NCMD to link with other data sets, leading to more comprehensive analysis in future.

## CDOP categories of death

**Category 1** – Deliberately inflicted injury, abuse or neglect: this includes suffocation, shaking injury, knifing, shooting, poisoning and other means of probable or definite homicide; also deaths from war, terrorism or other mass violence; includes severe neglect leading to death.

**Category 2** – Suicide or deliberate self-inflicted harm: this includes hanging, shooting, self-poisoning with paracetamol, death by self-asphyxia, from solvent inhalation, alcohol or drug abuse, or other form of self-harm. It will usually apply to adolescents rather than younger people.

**Category 3** – Trauma and other external factors: this includes isolated head injury, other or multiple trauma, burn injury, drowning, unintentional self-poisoning in pre-school children, anaphylaxis and other extrinsic factors. Excludes deliberately inflicted injury, abuse or neglect (Category 1).

**Category 4** – Malignancy; solid tumours, leukaemias and lymphomas and malignant proliferative conditions such as histiocytosis, even if the final event leading to death was infection, haemorrhage etc.

**Category 5** – Acute medical or surgical condition; for example, Kawasaki disease, acute nephritis, intestinal volvulus, diabetic ketoacidosis, acute asthma, intussusception, appendicitis; sudden unexpected deaths with epilepsy.

**Category 6** – Chronic medical condition; for example, Crohn's disease, liver disease, immune deficiencies, even if the final event leading to death was infection, haemorrhage etc. Includes cerebral palsy with clear post-perinatal cause.

**Category 7** – Chromosomal, genetic and congenital anomalies; Trisomies, other chromosomal disorders, single gene defects, neurodegenerative disease, cystic fibrosis and other congenital anomalies including cardiac.

**Category 8** – Perinatal/neonatal event; Death ultimately related to perinatal events, e.g. sequelae of prematurity, antepartum and intrapartum anoxia, bronchopulmonary dysplasia, post-haemorrhagic hydrocephalus, irrespective of age at death. It includes cerebral palsy without evidence of cause, and includes congenital or early-onset bacterial infection (onset in the first postnatal week).

**Category 9** – Infection; Any primary infection (i.e. not a complication of one of the above categories), arising after the first postnatal week, or after discharge of a preterm baby. This would include septicaemia, pneumonia, meningitis, HIV infection etc.

**Category 10** – Sudden unexpected death; where the pathological diagnosis is either 'SIDS' or 'unascertained', at any age. Excludes Sudden unexpected death with epilepsy (Category 5).

## Appendix 1: National Child Mortality Database Monitoring Report

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## Appendix 2: Analysis of child deaths (aged 0-17) by ethnicity & category of death - 2015-2021

Of the 616 child deaths reviewed by the panel between April 2015 and March 2021, 555 (90%) had an ethnicity recorded. The analysis presented below is therefore based on the 555 children where the ethnicity is known.

Over two thirds (69%) of the 555 child deaths across Pan-Lancashire, were White British, and 13% were Asian/Asian British Pakistani. *Figures 1 & 2* below show the number and proportion of deaths by broad ethnic group and category of death.

	Cat 1: Deliberately inflicted injury, abuse or neglect	Cat 2: Suicide or deliberate self-inflicted harm	Cat 3: Trauma and other external factors	Cat 4: Malignancy	Cat 5: Acute medical or surgical condition	Cat 6: Chronic medical condition	Cat 7: Chromosomal, genetic and congenital anomalies	Cat 8: Perinatal/ neonatal event	Cat 9: Infection	Cat 10: Sudden unexpected, unexplained death	TOTAL
White British	15	21	20	27	23	6	90	118	27	37	384 (69%)
All other White ethnic groups	<5	<5	<5	<5	<5	<5	6	7	<5	<5	23 (<5%)
Asian or Asian British - Bangladeshi	<5	<5	<5	<5	<5	<5	5	<5	<5	<5	8 (<5%)
Asian or Asian British - Indian	<5	<5	<5	<5	<5	<5	10	7	<5	<5	23 (<5%)
Asian or Asian British - Pakistani	<5	<5	5	<5	11	6	27	15	<5	<5	73 (13%)
Mixed	<5	<5	<5	<5	<5	<5	5	<5	<5	<5	9 (<5%)
Black/African/Caribbean	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	6 (<5%)
Any other ethnic groups	<5	<5	<5	<5	<5	<5	15	8	<5	0	29 (5%)
<b>Total</b>	<b>16</b>	<b>21</b>	<b>27</b>	<b>37</b>	<b>37</b>	<b>13</b>	<b>160</b>	<b>162</b>	<b>34</b>	<b>48</b>	<b>555 (100%)</b>

Figure 1: Number of deaths by broad ethnic group and category of death (Lancashire-14)

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Figure 2: Proportion of deaths in each category by broad ethnic group, 2015-2021

There were a disproportionate number of child deaths in the Asian/Asian British Pakistani ethnic group compared to the proportion of this ethnic group within the Pan-Lancashire population. Pakistani children aged 0-17 make up only 7% of the overall 0-17 population though account for 13% of the deaths.

Although child deaths in the Asian/Asian British Pakistani community may be disproportionate compared to the population, the majority of child deaths are from a White background (73%). The analysis below therefore provides further comparisons to be made between all White ethnic groups & all other ethnicities.

		Lancashire-14	
		All White ethnic groups	All Other ethnic groups
Cat 1:	Deliberately inflicted injury, abuse or neglect	<5%	<5%
Cat 2:	Suicide or deliberate self-inflicted harm	5%	<5%
Cat 3:	Trauma and other external factors	5%	<5%
Cat 4:	Malignancy	7%	<5%
Cat 5:	Acute medical or surgical condition	6%	9%
Cat 6:	Chronic medical condition	<5%	<5%
Cat 7:	Chromosomal, genetic and congenital anomalies	24%	43%
Cat 8:	Perinatal/ neonatal event	31%	25%
Cat 9:	Infection	7%	<5%
Cat 10:	Sudden unexpected, unexplained death	10%	5%
		100% (n=407)	100% (n=148)

Figure 3: Proportion of deaths by category of death for White and All other ethnic groups, 2015-2021

As shown by Figure 3, Category 8 (perinatal/neonatal event) deaths account for 31% (n=125) of all child deaths (where ethnicity was known) in the White group while the proportion for all other ethnic groups is 25% (n=37). By contrast 43% (n=64) of deaths from other ethnic groups are attributed to Category 7 (chromosomal, genetic and congenital anomalies) compared to only 24% (n=96) for the White group. The proportion of deaths are notably higher for White ethnicities in following categories:

Category 1: Deliberately inflicted injury, abuse or neglect

Category 2: Suicide or deliberate self-inflicted harm

Category 4: Malignancy

Category 8: Perinatal/ neonatal event

Category 9: Infection

Category 10: Sudden unexpected, unexplained death

For all other ethnic groups, the proportion of deaths are notably higher in the following categories:

Category 5: Acute medical or surgical condition

Category 6: Chronic medical condition

Category 7: Chromosomal, genetic and congenital anomalies

*Figures 4 and 5* below show the number of child deaths in each category of death (separately for Category 7 & 8) for all other ethnic groups, and all white nationalities. Of the child deaths within all other ethnic groups (n=148), 70% (n=104) deaths were in children from a South Asian (Pakistani, Indian or Bangladeshi) heritage, and a further 20% (29) were from any other group. Of the deaths within the White ethnic group, 94% (n=384) were White British and 6% (n=23) were from any other White ethnic groups.

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*Figure 4: Number of deaths in each category for other ethnicities (excluding White ethnic groups)*

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Figure 5: Number of deaths in each category for the White ethnic group

Children aged under 1, account for 62% (n= 345) of the child deaths. *Figure 6* shows the numbers of child deaths by category for these children. 72% (251) were White British or Other White ethnic groups, and 19% (64) were of South Asian (Pakistani, Bangladeshi or Indian) heritage

	Cat 1:	Cat 2:	Cat 3:	Cat 4:	Cat 5:	Cat 6:	Cat 7:	Cat 8:	Cat 9:	Cat 10:	TOTAL
	Deliberately inflicted injury, abuse or neglect	Suicide or deliberate self-inflicted harm	Trauma and other external factors	Malignancy	Acute medical or surgical condition	Chronic medical condition	Chromosomal, genetic and congenital anomalies	Perinatal/ neonatal event	Infection	Sudden unexpected, unexplained death	
White British	9	<5	8	<5	5	<5	59	104	16	32	236 (68%)
All other White ethnic groups	<5	<5	<5	<5	<5	<5	<5	7	<5	<5	15 (<5%)
Asian or Asian British - Bangladeshi	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5 (<5%)
Asian or Asian British - Indian	<5	<5	<5	<5	<5	<5	8	7	<5	<5	18 (5%)
Asian or Asian British - Pakistani	<5	<5	<5	<5	<5	<5	18	14	<5	<5	40 (12%)
Mixed	<5	<5	<5	<5	<5	<5	5	<5	<5	<5	8 (<5%)
Black/African/Caribbean	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5 (<5%)
Any other ethnic groups	<5	<5	<5	<5	<5	<5	7	8	<5	<5	17 (5%)
Total	9	<5	11	<5	8	<5	107	147	18	39	345 (100%)

Figure 6: Number of deaths by category and broad ethnic group for children aged under 1 year

As shown in *Figure 7*, the category of deaths in children aged under 1 year (infants) in the White and All other ethnic groups, compares similarly to the pattern which was highlighted for all ages. Once again there is a higher proportion of deaths in the White ethnic group (44%, n=37) from perinatal or neonatal events compared to 39% (n=110) in other ethnic groups. Similarly in other ethnic groups a higher proportion of deaths (45%, n=65) are attributed to chromosomal, genetic and congenital anomalies compared to 26% (n=42) in the White group.

		Lancashire-14	
		All White ethnic groups	All Other ethnic groups
Cat 1:	Deliberately inflicted injury, abuse or neglect	<5%	<5%
Cat 2:	Suicide or deliberate self-inflicted harm	<5%	<5%
Cat 3:	Trauma and other external factors	<5%	<5%
Cat 4:	Malignancy	<5%	<5%
Cat 5:	Acute medical or surgical condition	<5%	<5%
Cat 6:	Chronic medical condition	<5%	<5%
Cat 7:	Chromosomal, genetic and congenital anomalies	26%	45%
Cat 8:	Perinatal/ neonatal event	44%	39%
Cat 9:	Infection	<5%	<5%
Cat 10:	Sudden unexpected, unexplained death	14%	5%
		100% (n=251)	100% (n=94)

Figure 7: Proportion of deaths by category of death for children aged < 1 year by White and All other ethnic groups

As shown above, the proportion of deaths are notably higher for White ethnicities in following categories for children under 1 year:

Category 1: Deliberately inflicted injury, abuse or neglect

Category 3: Trauma and other external factors

Category 8: Perinatal/ neonatal event

Category 9: Infection

Category 10: Sudden unexpected, unexplained death

Children aged 1-17 years, account for 38% (n= 210) of the child deaths. Of those 74% (n=156) of them were White, and 19% (n=40) were of South Asian (Pakistani, Bangladeshi or Indian) heritage, as shown in Figure 8 (below).

	Cat 1:	Cat 2:	Cat 3:	Cat 4:	Cat 5:	Cat 6:	Cat 7:	Cat 8:	Cat 9:	Cat 10:	TOTAL
	Deliberately inflicted injury, abuse or neglect	Suicide or deliberate self-inflicted harm	Trauma and other external factors	Malignancy	Acute medical or surgical condition	Chronic medical condition	Chromosomal, genetic and congenital anomalies	Perinatal/ neonatal event	Infection	Sudden unexpected, unexplained death	
White British	6	21	12	26	18	<5	31	14	11	5	148 (70%)
All other White ethnic groups	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	8 (<5%)
Asian or Asian British - Bangladeshi	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5 (<5%)
Asian or Asian British - Indian	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5 (<5%)
Asian or Asian British - Pakistani	<5	<5	<5	<5	9	5	9	<5	<5	<5	33 (16%)
Mixed	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5 (<5%)
Black/African/Caribbean	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5 (<5%)
Any other ethnic groups	<5	<5	<5	<5	<5	<5	8	<5	<5	<5	12 (6%)
<b>Total</b>	<b>7</b>	<b>21</b>	<b>16</b>	<b>35</b>	<b>29</b>	<b>9</b>	<b>53</b>	<b>15</b>	<b>16</b>	<b>9</b>	<b>210 (100%)</b>

Figure 8: Number of deaths by category and broad ethnic group for children aged 1-17 years

As shown in Figure 9, causes of death are much more varied in children over the age of 1 year, however, deaths attributed to chromosomal, genetic and congenital anomalies (Category 7) account for the majority of deaths in other ethnic groups (39%, n=21), and over a fifth of the deaths in White ethnic groups (21%, n=32). Malignancy (Category 4) and Suicide or deliberate self-inflicted harm (Category 2) are the next largest categories of death for children in the White group, accounting for 33% (n=51) of deaths. In comparison, a higher proportion of deaths are attributed to Category 5 (acute medical/surgical condition), Category 4 (malignancy) and Category 6 (chronic medical condition), accounting for 37% (20) of deaths in the other ethnic groups.

		Lancashire-14	
		All White ethnic groups	All Other ethnic groups
Cat 1:	Deliberately inflicted injury, abuse or neglect	<5%	<5%
Cat 2:	Suicide or deliberate self-inflicted harm	13%	<5%
Cat 3:	Trauma and other external factors	8%	7%
Cat 4:	Malignancy	19%	9%
Cat 5:	Acute medical or surgical condition	12%	19%
Cat 6:	Chronic medical condition	<5%	9%
Cat 7:	Chromosomal, genetic and congenital anomalies	21%	39%
Cat 8:	Perinatal/ neonatal event	9%	<5%
Cat 9:	Infection	8%	7%
Cat 10:	Sudden unexpected, unexplained death	<5%	6%
		100% (n=156)	100% (n=54)

Figure 9: Proportion of deaths by category of death for children aged 1-17 years by White and All other ethnic groups



## Appendix 3: Department of Health & Social Care category of death descriptions

Category	Name & description of category	Tick box below
1	<p><b>Deliberately inflicted injury, abuse or neglect</b></p> <p>This includes suffocation, shaking injury, knifing, shooting, poisoning &amp; other means of probable or definite homicide; also, deaths from war, terrorism or other mass violence; includes severe neglect leading to death.</p>	<input type="checkbox"/>
2	<p><b>Suicide or deliberate self-inflicted harm</b></p> <p>This includes hanging, shooting, self-poisoning with paracetamol, death by self-asphyxia, from solvent inhalation, alcohol or drug abuse, or other form of self-harm. It will usually apply to adolescents rather than younger children.</p>	<input type="checkbox"/>
3	<p><b>Trauma and other external factors</b></p> <p>This includes isolated head injury, other or multiple trauma, burn injury, drowning, and unintentional self-poisoning in pre-school children, anaphylaxis &amp; other extrinsic factors. <b>Excludes</b> Deliberately inflicted injury, abuse or neglect. (Category 1).</p>	<input type="checkbox"/>
4	<p><b>Malignancy</b></p> <p>Solid tumours, leukaemias &amp; lymphomas, and malignant proliferative conditions such as histiocytosis, even if the final event leading to death was infection, haemorrhage etc.</p>	<input type="checkbox"/>
5	<p><b>Acute medical or surgical condition</b></p> <p>For example, Kawasaki disease, acute nephritis, intestinal volvulus, diabetic ketoacidosis, acute asthma, intussusception, appendicitis; sudden unexpected deaths with epilepsy.</p>	<input type="checkbox"/>
6	<p><b>Chronic medical condition</b></p> <p>For example, Crohn's disease, liver disease, immune deficiencies, even if the final event leading to death was infection, haemorrhage etc. <b>Includes</b> cerebral palsy with clear post-perinatal cause.</p>	<input type="checkbox"/>
7	<p><b>Chromosomal, genetic and congenital anomalies</b></p> <p>Trisomies, other chromosomal disorders, single gene defects, neurodegenerative disease, cystic fibrosis, and other congenital anomalies including cardiac.</p>	<input type="checkbox"/>

8	<p><b>Perinatal/neonatal event</b>  Death ultimately related to perinatal events, e.g. sequelae of prematurity, antepartum and intrapartum anoxia, bronchopulmonary dysplasia, post-haemorrhagic hydrocephalus, irrespective of age at death. It <b>includes</b> cerebral palsy without evidence of cause, and <b>includes</b> congenital or early-onset bacterial infection (onset in the first postnatal week).</p>	<input type="checkbox"/>
9	<p><b>Infection</b>  Any primary infection (i.e., not a complication of one of the above categories), arising after the first postnatal week, or after discharge of a preterm baby. This would include septicaemia, pneumonia, meningitis, HIV infection etc.</p>	<input type="checkbox"/>
10	<p><b>Sudden unexpected, unexplained death</b>  Where the pathological diagnosis is either 'SIDS' or 'unascertained', at any age. <b>Excludes</b> Sudden Unexpected Death in Epilepsy (category 5).</p>	<input type="checkbox"/>

## Appendix 4: Recognised Adverse Childhood Experiences (ACEs) and definition

ACE	Definition
Physical abuse	Intentional use of physical force against a child that results in, or has the potential to result in, physical injury.
Sexual abuse	Any completed or attempted sexual act, sexual contact with, or exploitation of a child by a caregiver.
Emotional abuse	Intentional caregiver behaviour that conveys to a child that they are worthless, flawed, unloved, unwanted, endangered, or valued only in meeting another's needs
Neglect	Failure by a caregiver to meet a child's basic physical, emotional, health, or educational needs—or a combination of these.
Domestic violence	Any form of verbal or physical violence between a caregiver and his or her adult partner or ex-partner
Parental separation	Divorce or separation between parents or caregivers
Substance misuse	Living with a parent, caregiver or other family member who misuses substances, including illegal drugs and prescription medications
Alcohol misuse	Living with a parent, caregiver or other family member who misuses alcohol
Mental health issues	Living with a parent, caregiver or other family member who is depressed, has other mental health problems or has ever attempted suicide
Incarceration	Living with a parent, caregiver or other family member who sentenced to serve time in a prison or youth offending institution