Child Death Overview Panel (CDOP)

Annual report 2017-18

Bradford Safeguarding Children Board

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1. Introduction

Since 1st April 2008, the Bradford Safeguarding Children Board (BSCB) established the Child Death Overview Panel (CDOP) to accommodate the national guidance and statutory requirement which was updated in Working Together to Safeguard Children 2015[1]. The aim of the CDOP is to systematically review all child deaths (from birth to 17 years 364 days of age) in order to improve the understanding of how and why children in Bradford die, identify whether there were modifiable factors which may have contributed to each individual death, and use the findings to take action to prevent future such deaths. The panel is multi-agency and brings in expertise from a wide range of partners to ensure the discussions within the meetings are robust and challenging where required (see Appendix 1 and 2 for further details). The CDOP also has a role in categorising a child's death into one of 10 causes of death categories. Definitions around modifiable factors and the cause of death categories are highlighted in Appendix 3.

The Wood Review[2] was published in early 2016. The review had been undertaken to review the role and functions of Local Safeguarding Children Boards (LSCBs), and the government published its response in May 2016 and this included a review of the CDOP process. The government wanted to introduce a more flexible, simpler statutory framework for LSCBs but still focused on engagement of key partners in particular the local authority, health and police with a continued multiagency approach. It is proposed that the responsibility for CDOPs will remain statutory and will move from the Department for Education to the Department of Health. Following consultation draft Working Together guidance was published in April 2018 and the Working Together Guidance was published in early July 2018; a detailed Child Death Review Guidance relevant to CDOP will be published late July 2018[3,4,5]. CDOP will become a statutory responsibility of both the Clinical Commissioning Groups (CCGs) and Local Authority.

This report details the work of the Child Death Overview Panel (CDOP) during 2017/18. Having been established for ten years Bradford CDOP is able to identify emerging trends and themes in the data, and this enables the panel to make more meaningful recommendations. Hence, this report also details the 8 complete years of reviewed deaths (100%) from 2008/09 to 2015/16, and near complete reviewed deaths (96%) in 2016/17 (see Figure 2: Child deaths reported to and reviewed by CDOP, Section 3).

The CDOP looks for factors contributing to a child's death that could have been modifiable, and where shared learning could reduce the chances of a recurrence of the circumstances around that death. This in turn would lead to a reduction in infant and child mortality rates in the future. Infant mortality rates for Bradford have reduced in recent years especially in deprived areas, but as with child mortality rates, they remain above the regional and national rates (see Appendix 4). The CDOP has a Modifiable Action Plan and Issues Log which it monitors closely to ensure all identified actions are completed. An annual Away Day is also held every May to look at all reviewed deaths for the previous year, areas of interest and overall themes for all reviewed deaths since April 2008.

1 https://www.gov.uk/government/publications/working-together-to-safeguard-children--2

2 https://www.gov.uk/government/publications/wood-review-of-local-safeguarding-children-boards

3 https://www.nspcc.org.uk/what-we-do/news-opinion/government-consultation-working-together-guidance/

4 https://consult.education.gov.uk/child-protection-safeguarding-and-family-law/working-together-to-safeguard-children-revisions-t/supporting_documents/Working%20Together%20to%20Safeguard%20Children.pdf

5 https://www.gov.uk/government/publications/working-together-to-safeguard-children--2

2. Child deaths reviewed by CDOP in 2017/18

During the year April 2017 – March 2018 (2017/18), 58 child deaths were reported to the Bradford child death review team. 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.

In 2017/18 (1st April 2017 – 31st March 2018) Bradford CDOP reviewed 69 child deaths; these reviews included 29 deaths that occurred in 2017/18, 33 deaths that occurred in 2016/17, and 7 deaths that occurred in previous years. Overall, 77% of deaths were reviewed within 12 months which is similar to national data where 76% of all deaths were reviewed within 12 months[6].

2.1 Demographics (age, gender, ethnicity), 2017/18

Of the 69 cases reviewed[7], **approximately two thirds (67%) of these deaths were in under one year olds and of these, most were in the first 28 days. There is also a higher proportion of death in females (54%) than males (46%) which differs from the national data for 2016/17**[8]**, where the reverse of this is evident. However, to note that this is only one year of reviews. South-Asian children were over represented compared to the population of the Bradford district:**

- 67% (46) of the deaths reviewed occurring in children under 1 year of age
  - 45% (31) of the deaths reviewed occurred in the neonatal period which is from birth to 28 days
  - 22% (15) of the deaths reviewed were children aged 28-days–1 year

- 33% (23) of the deaths reviewed were children aged 1-17 years of age
  - 10% (7) of the deaths reviewed were children aged 1-4 years of age
  - 16% (11) of the deaths reviewed were children aged 5-13 years of age
  - 7% (5) of deaths reviewed were children aged 14-17 years of age

- 46% (32) were Male
- 54% (37) were Female

- 65% (45) were children of South-Asian ethnicity
- 29% (20) were children of White British ethnicity
- 6% (4) were children of 'Other'[9] ethnicities

An estimated 532,539 people live in the Bradford District[10], with a large proportion of the population dominated by children and young people. The overall population of Bradford is also ethnically diverse, with just under two-thirds (64%) of the district's population identifying themselves as White British, and around 25% as South-Asian according to the 2011 Census. For under 18's, half of the population (50%) identify themselves as White British, and 37% as South-Asian (2011 Census). This is in contrast to the demographic findings above around ethnicity, where 65% of child deaths reviewed are recorded as being from a South-Asian background. The 2017/18 findings above are also similar to analysis of the 2008-2018 data in Section 3.

6 https://www.gov.uk/government/statistics/child-death-reviews-year-ending-31-march-2017

7 NB: Due to rounding, some percentage totals may not correspond with the sum of the separate figures.

8 https://www.gov.uk/government/statistics/child-death-reviews-year-ending-31-march-2017

9 'Other' ethnicities in this case include those categorised as African, and Mixed.

10 Latest population figures produced by the Office for National Statistics (ONS) on 22 June 2017

2.2 Causes of death, 2017/18

Of the 69 cases reviewed, where it was possible to classify the cause of death into one of the ten categories[11] used nationally, **72% were due to Category 7 and Category 8 deaths:**

- 30 (43%) deaths were categorised as chromosomal, genetic and congenital anomalies (Category 7)
- 20 (29%) deaths were categorised as perinatal/neonatal events (Category 8)
- 19 (28%) deaths fell into other categories

Compared to nationally, the proportion of Category 7 deaths was above average. This has been the case for many years and is outlined in more detail in the section on all reviewed deaths since 2008 in Section 3. South-Asian children are over-represented particularly in Category 7 deaths (genetic conditions) and this is similar to analysis of the 2008-2018 data in Section 3.

2.3 Expected/Unexpected deaths, 2017/18

Child deaths fall into the two categories of either expected or unexpected. As set out in Working Together to Safeguard Children (2015)[12] 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 69 cases reviewed, 32% (22 deaths) were unexpected and 67% (46 deaths) were expected. In one case it was not known whether the death was expected or unexpected

Between April 2008 – March 2018, the trends between expected and unexpected deaths did not change significantly with 26% of all deaths overall being unexpected (see Figure 3: Trends over time of expected or unexpected child deaths, Section 3).

2.4 Modifiability classification, 2017/18

See Appendix 3 for the definition of modifiable classification current for 2017/18. This was altered in April 2016 to allow more consistent inclusion of significant risk factors such as smoking or obesity in pregnancy and consanguinity with more clearly defined criteria for inclusion.

Of the 69 cases reviewed a total of 19 deaths were considered to have modifiable factors (28%). These modifiable deaths were in the following categories:

- Category 2 (suicide or deliberate self-inflicted harm)
- Category 3 (trauma and other external factors)
- Category 4 (malignancy)
- Category 6 (chronic medical condition)
- Category 7 (chromosomal, genetic and congenital anomalies)
- Category 8 (perinatal/ neonatal event)
- Category 10 (sudden unexpected and unexplained death).

The percentage of reviews with modifiable factors has increased from 10% in 2015/16, reflecting the recent change of the CDOP (such as the inclusion of risk factors around consanguinity, smoking and obesity which are now more often included as outlined in Appendix 3) which has ensured modifiable factors are now in line with other CDOPs and

11 See Appendix 3 for 10 categories for cause of death

12 http://www.workingtogetheronline.co.uk/chapters/chapter_five.html

national figures. Nationally the percentage of deaths considered to be 'modifiable' was 27%[13] in 2016/17, which is similar.

Summary of the CAUSAL FACTORS noted for the 19 modifiable deaths:

- **RISK FACTORS:**
  - Obesity & Smoking –Category 7 & 8 (2 deaths - both risk factors present)
  - Consanguinity – Category 7 (3 deaths)

- **ACCIDENTS:**
  - Road traffic accident – Category 3 (1 death)
  - Ingestion of foreign bodies – Category 3 (2 deaths - both unascertained)

- **SIDS & CO-SLEEPING:**
  - All deaths with at least 2 risk factors & often multiple risk factors e.g. smoking, drugs, co-sleeping, sofa sleeping etc – Category 10 (5 deaths)

- **CLINICAL INCIDENTS:**
  - Range of Incidents – Categories 4,6,7,8 (4 deaths)

- **SAFEGUARDNG & NON IMMUNISATION:**
  - Category 9 (1 death)

- **SUICIDE/UNASCERTAINED:**
  - Category 2 (1 death - cause of death unascertained)

Recommendations from the 19 modifiable deaths reviewed in 2017/18:

- Deaths linked to smoking & obesity in pregnancy – district action to reduce smoking in pregnancy and district wide actions (Healthy Bradford) and local services for women who are obese and are smoking in pregnancy (2 deaths)
- Deaths where Genetic condition linked to consanguinity – Every Baby Matters Recommendation 7 group actions increasing genetic inheritance awareness (3 deaths)
- Road traffic accident – specific road safety recommendations (1 death)
- Ingestion of foreign bodies – awareness via Newsletter and alerts (2 deaths)
- Sudden Infant Death Syndrome (SIDS) with co-sleeping and risk factors – continued awareness raising across the district and assurance from key organisations and staff regarding their approach with families, and e-training around Safe Sleeping re-launched (5 deaths)
- Clinical incidents – serious incident recommendations and further in depth audit undertaken into deaths in out-of-hours services by CDOP (4 deaths)
  - Root Cause Analysis (RCA) improvements in foetal heart monitoring and handover guidance
  - Serious Incident – standard operating procedures for children with transplants
  - Serious Incident – delay to diagnosis of heart condition and specific recommendations made
  - Internal investigation of potential delay to diagnosis via CT Scan
- Safeguarding & Non Immunisation issues – ensured appropriate services and support were in place, informed a Learning Event with staff and NHS England led actions to increase Pertussis vaccination in pregnancy (1 death)
- Suicide/Unascertained – Learning Event with staff (1 death)

The actions above are monitored within the CDOP Modifiable Action plan to ensure they are all completed in a timely manner.

13 https://www.gov.uk/government/statistics/child-death-reviews-year-ending-31-march-2016

Further to the recommendations set out above, the panel records an 'issues log' as outlined earlier. The log includes issues which did not cause the death of the child but where it was identified that actions could be taken to improve services and support for families in the future or specific actions needed with an individual family. Identifying these potential risk factors or issues surrounding the child's death enables follow up action to be taken with organisations or lead clinicians to promote good practice. This in turn can potentially impact on the reduction of future child deaths. **In 2017/18,** a number of issues were highlighted as potential risk factors or issues. These are set out in the table below (Figure 1: Issues identified by CDOP), together with actions the Panel identified to address them.

Figure 1: Issues identified by CDOP, 2017/18

Key risk factors/issues identified	Proposed specific action
Smoking, diabetes and obesity in pregnancy all common risk factors which have been increasingly noted; not causal for the particular cause of death on individual level.	• District wide actions to reduce smoking, diabetes and obesity • Specific actions in place for maternity services to manage diabetes, obesity & support to stop smoking
Genetic inheritance issues & consanguinity as a risk factor. Commonly genetic diagnosis is unclear - in many cases genetic tests are awaited and this can take many months to arrive	• Genetic counselling offer; ensuring referrals • Every Baby Matters Recommendation 7 work to increase awareness • Ensuring family members are made aware of genetic risk and appropriate tests undertaken • Chase up all genetic tests as quickly as possible
Non-viable babies e.g. <23 weeks	• Monitoring of all cases and awaiting new Guidance
Domestic abuse and safeguarding issues were very common across all deaths reviewed	• Ensure flags for future pregnancies where relevant and any follow-up support is in place • Pre-birth assessment pathway now in place
Mental health issues and isolation	• Ensure parents linked to appropriate services
Vulnerable at risk young mothers, including those leaving or had left care – in some cases at risk of CSE or domestic abuse	• Ensure follow up contacts with Looked After Children (LAC) and/or at risk of Child Sexual Exploitation (CSE)
Limitation of Treatment Agreement (LOTA) & advanced care plans – good practice.	• Monitor use of LOTAs and follow up where use identified as not fully compliant
Delays to review at CDOP	• Red flag system now in place to monitor delays
Variable levels of bereavement support – noted good practice frequently for support provided by the Forget Me Not Hospice and Martin House Hospice	• Continue to monitor Bereavement support for families and note good and poor practice. Bereavement Services report due in spring 2018
Specific areas: Family unaware of Post-mortem result, issues with sterile cleaning fluids	• Ensure family are aware of Post-mortem report • Local change in policy for use of sterile cleaning products in place
Cause of death judged differently to Coroner e.g. unascertained vs SIDs & Co-sleeping	• Discussions with Coroner taken place and 6 month follow up planned
Insufficient details -children who died abroad	• On-going monitoring
Sudden death of a child when parents not prepared for this event	• On-going work by Paediatricians & antenatally to ensure parents are prepared for possible sudden death with congenital heart disease
Massive haematemesis procedures	• Protocol was reviewed to ensure as robust as possible

Key CDOP Activity in 2017/18:

- Total of 8 meetings in the year which included some extended meetings to ensure more cases could be reviewed.
- Annual Away Day held in April 2018 to review all data and understanding for 2017/18 and audit of Sudden Infant Deaths presented and discussed.
- CDOP database updated and additional fields added.
- Awareness raising over the year for SIDS and co-sleeping and risk factors, foreign bodies and other key areas via regular Newsletters.
- Continued use of Red Flag System established around long delays to review or significant issues identified in reported deaths yet to be reviewed – this is to ensure any new areas of concern are identified early and any long delays to review are addressed where possible.
- CDOP members presented at Safeguarding Week in 2017 which was well evaluated and took part in training events throughout the year.

3. Child deaths reviewed by CDOP between 2008/09 – 2017/18 (10-year period)

The following section provides key analysis and highlights changes in themes and trends of deaths in children (see Appendix 5 for full analysis). The following data includes the deaths of children under 18 years of age[14], resident in Bradford District who died between 1st April 2008 and 31st March 2018.

Figure 2: Child deaths reported to and reviewed by CDOP, 2008/09-2017/18

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Notified	85	108	108	70	68	66	80	61	68	58	**772**
Reviewed	85	108	108	70	68	66	80	61	65	29	**740**
% Reviewed	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**96%**	**50%**	**96%**

Source: Bradford CDOP notifications data – Public Health Analysis Team, City of Bradford Metropolitan District Council

A total of 740 deaths of the 772 notified deaths (96%) have been reviewed since April 2008. Delays due to inquests, and other investigations outside the control of CDOP, can affect the year in which a death is reviewed. There were 32 outstanding deaths to be reviewed at March 2018, which is lowest number for some time. In addition, we now have a red flag system in place to ensure we are sighted on cases with a long delay to review or significant issues identified in the reported deaths. This ensures we can speed up the process where required and be fully aware of any emerging new causes of death.

3.1 Demographics (age, gender, ethnicity), 2008/09 – 2017/18

Of the 740 cases reviewed[15], most deaths were in the first year of life (69%), particularly within the first 28 days. Overall, South-Asian children are over-represented in the deaths (62%) compared to the under-18 South-Asian population of Bradford district (37%). A higher proportion of deaths is noted in males (53%) compared to females (47%) which is similar to national data for 2016/17 (56% of death in males and 44% females)[16]. Also there was higher proportion of deaths in White British boys as noted below:

14 Up to the 18th birthday and described as 0-17 years

15 NB: Due to rounding, some percentage totals may not correspond with the sum of the separate figures.

16 https://www.gov.uk/government/statistics/child-death-reviews-year-ending-31-march-2017

- 69% (508) of the deaths reviewed occurred in children under 1 year of age
  - 43% (319) of deaths reviewed occurred in neonatal period (birth to 28 days)
  - 26% (189) of deaths reviewed were children aged 28-days – 1 year

- 31% (232) of the deaths reviewed were children ages 1-17 years of age
  - 13% (96) of the deaths reviewed were children aged 1-4 years of age
  - 11% (80) of the deaths reviewed were children aged 5-13 years of age
  - 8% (56) of deaths reviewed were children aged 14-17 years of age

- 53% (394) were Male
- 47% (346) were Female

- 62% (460) were children of South-Asian ethnicity
- 29% (217) were children of White British ethnicity
- 9% (63) were children of 'Other'[17] ethnicities

Further analysis into ethnicity and gender differences, showed South-Asian children are specifically over–represented in Category 7 deaths as has been noted in previous reports. Overall, although the proportion of deaths in White British children is lower (29%) compared to the under-18 White British population in Bradford (50%), detailed analysis of White British deaths by gender demonstrated a higher incidence of deaths in boys (61%) than in girls (39%); this difference is not seen in South-Asian children or other ethnicities. There are more deaths in White British boys in Categories 7, 8 and 10 and these deaths were more likely to be unexpected and modifiable. These finding require further exploration and discussion with other regional and national CDOPs; there is no national child death review analysis published for this specific area so it is not possible to compare with national findings.

3.2 Expected or unexpected deaths, 2008/09 – 2017/18

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.

Figure 3: Expected or unexpected child deaths, 2008/09-2017/18

Period 2008-2017	
Expected deaths	73% (540)
Unexpected deaths	26% (194)
Unknown whether death was expected/unexpected	1% (7)
Total	**100% (740)**

Source: Bradford CDOP review data

Of the 740 cases reviewed[18], 26% (194) were unexpected deaths and 73% (540) were expected. A higher proportion of the unexpected deaths are attributable to the following categories:

- Category 3 (trauma and other external factors)
- Category 7 (chromosomal, genetic and congenital anomalies)
- Category 8 (perinatal/ neonatal event)
- Category 9 (infection)
- Category 10 (sudden unexpected and unexplained death).

17 'Other' ethnicities in this case include African, East Asian, Eastern European, Mixed, White Other, and Other

18 NB: Due to rounding, some percentage totals may not correspond with the sum of the separate figures.

From the 8 complete years of reviewed deaths from 2008/09 to 2015/16 and near complete reviewed deaths between 2016/17 and 2017/18, the difference between expected and unexpected deaths remains generally unchanged.

Figure 4: Trends over time of expected or unexpected child deaths

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Expected	78%	78%	80%	75%	66%	79%	70%	68%	74%	67%	**73%**
Unexpected	19%	22%	19%	24%	33%	21%	30%	32%	26%	32%	**26%**
Not Known	3%	0%	1%	2%	1%	0%	0%	0%	0%	1%	**1%**
Grand Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Bradford CDOP review data

3.3 Causes of death, 2008/09 – 2017/18

Of the 740 deaths reviewed over the last 10 years, where it was possible to classify the cause of death into one of the ten categories used nationally**, 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 74% of all reviewed deaths:**

- 43% (318) of deaths were categorised as chromosomal, genetic and congenital anomalies (Category 7)
- 31% (227) of deaths were categorised as perinatal/neonatal events (Category 8)
- 26% (192) of deaths fell into other categories

The proportion of deaths attributable to chromosomal, genetic and congenital anomalies (Category 7) is higher in Bradford (43%) than nationally (25%)[19].

Genetic conditions can occur across all families due to sporadic, autosomal recessive/autosomal dominant or X-linked causes. In addition, some cases are not known as it is not possible to identify the cause. Around one third (32%) of all Category 7 deaths in Bradford are autosomal recessive in nature, and this type of condition is twice as likely to occur if the couple are consanguineous than in the whole population; also, in some families where the rare genes which cause autosomal recessive conditions are common and cousin marriage has been practised for several generations the risk can be much higher[20]. Consanguinity is common in South-Asian families locally and 53% of all South Asian children who died due to Category 7 as a whole are from families who have married their cousin. Sporadic causes account for 33% of all Category 7 deaths and in 85 cases (34%), the genetic cause of the Category 7 deaths was unknown. Improvements in genetic testing in the future will enable a more accurate diagnoses to be made in many of these presently 'unknown genetic cause' deaths.

Overall numbers and proportions of deaths are reducing except for Category 7 and Category 10 in under 1 year olds, and Category 7 in 1-17 year olds (Figs 12,13,14,15).

3.4 Modifiable factors, 2008/09 – 2017/18

The panel look at all the factors in the child's life to ascertain if any factors may have affected their health and/or death, which could have been prevented and/or modified.

Of the 740 cases reviewed, a total of 99 deaths were considered to have modifiable factors (13%). This is less than nationally (27% in 2016/17) but it must be noted that

19 https://www.gov.uk/government/statistics/child-death-reviews-year-ending-31-march-2016

20 https://borninbradford.nhs.uk/our-findings/different-findings-in-a-nutshell/babies-born-with-serious-conditions/

the methodology for this has changed since April 2016 and in 2016/17 and 2017/18 this increased to 28% which is more in line with national data.

Key demographics to note of the 99 modifiable deaths:

- 60% (59) were children ages under 1 year of age
- 40% (40) were children ages 1-17 years of age

- 52% (51) were Male
- 48% (48) were Female

- 48% (48) were children of South-Asian ethnicity
- 39% (39) were children of White British ethnicity
- 12% (12) were children of 'Other'[21] ethnicities

For this 10-year period the following themes for potentially modifiable causes of death which have continued up until 2018:

- Sudden Infant Death in Infancy (SIDS) and Co-sleeping with risk factors
- Specific clinical incidents over a range of causes
- Road traffic collisions
- Accidents
- Risk factors around Consanguinity, Obesity & Smoking in pregnancy
- Serious Case Reviews and safeguarding issues in a small number of cases
- Suicides (nil since 2016)

Less common modifiable causes of death occurring which have not repeated since 2015:

- Drownings in bath and death in fires
- Asthma

4. Actions & lessons learned

What has been done to reduce risk of future deaths across the district?

- SIDS and co-sleeping and risk factors awareness & organisational response audited
- Serious Case Review (SCR), Safeguarding issues & Clinical incidents – range of actions by organisations via SCR recommendations and serious incident action plans – CDOP seeks assurance all actions completed
- Road traffic collisions – road safety actions in place and specific organisational actions
- Smoking/obesity/genetic inheritance risk – district wide work as part of Actions plans for Every Baby Matters, Maternity Board and district wide work to reduce obesity and smoking in pregnancy and increase genetic inheritance awareness
- Suicide audit and monitoring fed into Suicide Prevention Action Plan for the district
- Safeguarding – work by all organisations as part of the BSCB Action plan

21 'Other' ethnicities in this case includes Eastern European, and Mixed.

5. Conclusion

Overall infant and child mortality rates are reducing but remain above national and regional rates. CDOP continues to seek assurance from lead organisations that all actions within the Modifiable Action Plan are being fully implemented by lead organisations across all the recommendation areas. In addition, the updated Child Death Review Guidance will be published in late July 2018 and will be the Local Authority and CCGs have joint statutory responsibility for CDOP and will be reporting to the Department of Health and NHS England has a key role nationally and regionally.

The current focus for 2018/19 is:

- Continue to monitor new child deaths over 2018/19 and any changes in demographic profile or causes of death
- Continue to update and monitor Modifiable Action Plan/Issues Log
- Ensure new Working Together and CDOP Guidance is implemented
- Training about CDOP and CDOP findings presented in Safeguarding Week
- Key findings to be fed into key groups e.g. Every Baby Matters groups, Maternity Partnership
- Annual Away Day for in depth analysis May 2019
- Continue to focus on:
  - SIDS & Co sleeping – awareness and organisational response
  - Suicide monitoring & Suicide Prevention Plan for district
  - Smoking/obesity/consanguinity & genetic risk – district wide actions led via Maternity & Children's Programme Board, Every Baby Matters Group and other Key partners
  - Serious Case Reviews, Safeguarding issues & Clinical incidents – ensuring all actions identified in recommendations are fully implemented
  - Accident Prevention & Road Safety across the district – ensuring actions taken

In this way we continue to understand why children die in Bradford district and seek to ensure all organisations and partners work towards reducing the risk of death for all children and young people in the district and hence reduce infant and child mortality rates in the future.

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APPENDIX 1 (CDOP): Membership of Bradford CDOP

CDOP is composed of a standing core membership as follows:

- Specialist Children's Services
- Health – Primary care
- Education
- Police
- Coroner's Office
- Hospital Chaplain
- Public Health
- Sudden Infant Death in Childhood (SUDIC) paediatricians
- Health – Acute Trusts
- Health – Bradford Teaching Hospitals NHS Foundation Trust and Airedale Hospital NHS Foundation Trust
- Other members as co-opted to specific meetings

Also in attendance is the manager of the Bradford Safeguarding Children Board, as an advisor, and the CDOP Manager.

Figure 1: Membership of the Bradford CDOP

Name	Role	Organisation
CBMDC Public Health	Dr Shirley Brierley	Chair
BSCB	Mark Griffin	Board Manager
BTHFT	Dr Eduardo Moya	Consultant Paediatrician
BTHFT	Dr Catriona McKeating	Consultant Paediatrician
BTHFT	Dr Chakra Vasudevan	Consultant Neonatologist
BTHFT	Sara Keogh	Head of Midwifery
BTHFT	Shaheen Kauser	Muslim Chaplain
BTHFT	Vicky Cotter	Named Nurse Safeguarding Children
ANHST	Dr Kate Ward	Consultant Paediatrician
ANHST	Joanne Newman	Named Nurse Safeguarding Children
CCGs	Jude McDonald	Deputy Designated Nurse Vice Chair
West Yorkshire Police	Granville Ward	Serious Case Review Officer
West Yorkshire Police	Joanna Fraser	Serious Case Review Officer
CBMDC	Ashraf Seedat	Senior Educational and Child Psychologist
CBMDC	Susan Tinnion	Service Manager Children's Social Care
BDCFT	Amanda Lavery	Safeguarding Service Manager

Deputies
In exceptional circumstances, where a member is unable to attend, another appropriate person may attend in their stead. The Vice-chair may deputise for the Chair.

The Bradford CDOP meets on a monthly basis. Additional members have been co-opted to the panel when relevant, for the cases scheduled to be reviewed. Since the establishment of CDOP in 2008, the panel has consistently strived to increase the number of cases reviewed each month, and additional meetings are held if required to ensure a backlog does not build up. This also allows for modifiable factors and issues to be identified sooner, and changes to practice can be implemented. This year a new database has been set up to allow accurate transfer of information between the CDOP Manager and Public Health to assist with analysis.

Notification of Death
Any professional who becomes aware of a child death is required to notify the Child Death Manager at the Child Death Review office either by completing a notification form or by telephoning the office. The Coroner's Office and the Registrar of Births Deaths and Marriages have a statutory responsibility to engage in the child death review process by notifying the Manager of all deaths reported to them. There can be confidence, therefore, that information on all deaths is captured by the Child Death Review Manager.

Each agency involved with children and families has a nominated individual who takes responsibility for coordinating the information required for the review of each death. The data collection forms (Agency Report Forms – Form B) are distributed via the administrator and copies of the various forms can be found at the Department for Education on the Gov.uk website[22].

22 Child death reviews: forms for reporting child deaths. Available at: https://www.gov.uk/government/publications/child-death-reviews-forms-for-reporting-child-deaths

APPENDIX 2 (CDOP): Terms of Reference of Bradford CDOP

Purpose
The CDOP should undertake a review of all child deaths (excluding stillbirths and planned terminations of pregnancy) from birth up to the age of 17 years 364 days in the LSCB area.

Through a comprehensive and multidisciplinary review of the child deaths, the Bradford CDOP aims to better understand how and why children die across the Bradford district and use the findings to take action to prevent other deaths and improve the health, wellbeing and safety of children in the area.
The CDOP will meet its function as set out in Chapter 5 of Working Together to Safeguard Children (2015).

Remit
CDOP will collect and analyse multi-agency information about each child with a view to:

- Review each child death (except still births and planned terminations of pregnancy) of children normally resident in the Bradford district
- To evaluate data on the deaths of all children normally resident in the Bradford district identifying lessons to be learnt or issues of concern
- To understand the cause of death and assess whether the death was preventable.
- Collect and analyse information about each child death with a view to identifying any case giving rise to the need for a serious case review
- To collect a minimum data set as required by the DfE and submit this annually for national data collection
- To meet monthly to review and evaluate data on all child deaths
- To learn lessons regarding the death and causes of death in the Bradford district in order to establish if there are any trends/themes
- To learn any lessons about the professional and agency responses to child deaths
- To disseminate lessons and make recommendations to the LSCB and partner agencies on actions to take to prevent child deaths including guidance/protocols or procedures, raising staff awareness and community awareness campaigns
- To use the rapid response process to review unexpected child deaths
- Cases involving a criminal investigation will not be reviewed before the conclusion of proceedings, as with those cases where an Inquest is being conducted
- To produce and publish and annual report that is aggregated and anonymised

Accountability
The Chid Death Overview Panel is responsible, through its chair, to the chair of the Bradford Safeguarding Children Board.
The CDOP Sub Group is accountable to the BSCB. The Sub Group will raise with the Board issues that need resolution beyond the remit of its members.

Membership
The agencies forming the core membership of the Group are:

- CBMDC Children's Social Care
- CBMDC Education Services
- CBMDC Public Health
- Clinical Commissioning Groups
- Bradford Children's Safeguarding Board
- Bradford Teaching Hospital Foundation Trust
- Airedale Hospital Foundation Trust
- West Yorkshire Police

The Group may co-opt additional or specialist members as required for the purposes of specific pieces of work. The current list of named representatives is shown at Appendix 1.

Operational arrangements

- The Board will select its Chair and deputy Chair. The Chairperson should be a member of BSCB.
- Meetings will be regarded as quorate or otherwise, in the light of material to be considered and decisions to be taken, at the discretion of the Chair.
- Standing meetings of the CDOP will be held monthly and additionally meetings held as and when required.
- Administrative support will be provided by BSCB. Agendas and associated papers will be circulated at least 5 days in advance of the meeting.
- Conflicts of Interest will be declared at each meeting regarding case involvement by panel members.

Voice of the child

Bradford SCB is committed to listening to the views of children and young people who use services and benefit from our protocols. We will involve them wherever possible in identifying needs and in planning, developing and improving policy and training.

Reporting and Governance Arrangements

Through its chair the Sub Group will:

- Provide a highlight report to each (quarterly) meeting of the BSCB. This will include a scorecard that reports on local and national indicators, benchmarking the partnership against other areas and evidences the effectiveness of the work of each Board partner in relation to safeguarding and promoting the welfare of children.
- Review the business/work plan annually
- Produce an annual report which will be incorporated into the BSCB Annual Report
- Review the Terms of Reference every 3 years (unless appropriate do sooner) and propose amendments to BSCB

Dispute

In the event of a dispute or conflict of interest arising between agencies across or within groups, which cannot be resolved, the Chair will draw this to the attention of the BSCB Chair for appropriate action and the BSCB Escalation Policy for Resolving Professional Disagreements will be invoked.

APPENDIX 3 (CDOP): Definition of Preventable and Modifiable Deaths and 10 Categories for Cause of Death

Definitions Used as cited in Statistical Release for Child Death Reviews: year ending March 2011 Dept. for Education July 2011:

1. Preventable/Potentially preventable death: Definition used from April 2008 to March 2010

Preventable – A preventable child death is defined as events, actions or omissions contributing to the death of a child or a sub-standard care of a child who died, and which, by means of national or locally achievable interventions, can be modified.

Potentially preventable – A potentially preventable death with same definition as above.

2. Modifiable death: Definition changed from April 2010 onwards

A modifiable death is defined as "The Panel have identified 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".

2.1 CDOP panel agreed from April 2016 to use the following definitions:

To decide if consanguinity is a risk factor and the case is to be deemed modifiable or non-modifiable:

i. If the parents are consanguineous and the child has a genetic condition which is identified for the first time and there is no previous history of similar conditions within the family, the case will be deemed to be NON MODIFIABLE

ii. If the parents are consanguineous, the child has a genetic condition and the same condition has been diagnosed within the family in previous children or close relatives and it is the type of condition associated with consanguinity (autosomal recessive condition) then the case will be deemed MODIFIABLE

To decide if Smoking, Obesity and other lifestyle risk factors are to be deemed modifiable or non-modifiable:

If a lifestyle risk factor such as smoking or obesity is deemed on the evidence presented to have had a significant role in the cause of death in an individual child, then this will be identified as a MODIFIABLE risk factor

10 Categories for Cause 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 sever 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 pals 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).

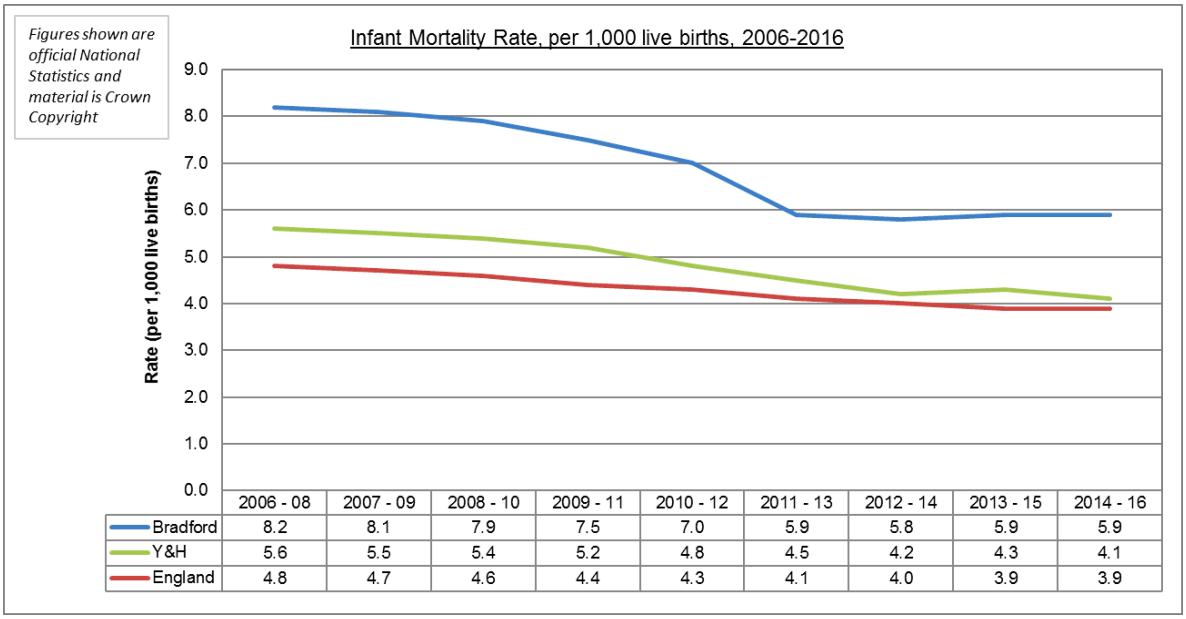
APPENDIX 4 (CDOP): Infant and child mortality rates

Figure 1: Mortality rates, 2014–2016

	Infant (<1 year) mortality rate, per 1,000 live births	Child (1-17 years) mortality rate, per 10,000 population
Bradford	5.9	17.8
Yorkshire and The Humber	4.1	13.2
England	3.9	11.6

Source: PHE, Child Health Profiles 2017

Figure 2: Infant mortality rates for Bradford District vs National/Regional rates, 2006-08 to 2014-16



	2006 - 08	2007 - 09	2008 - 10	2009 - 11	2010 - 12	2011 - 13	2012 - 14	2013 - 15	2014 - 16
Bradford	8.2	8.1	7.9	7.5	7.0	5.9	5.8	5.9	5.9
Y&H	5.6	5.5	5.4	5.2	4.8	4.5	4.2	4.3	4.1
England	4.8	4.7	4.6	4.4	4.3	4.1	4.0	3.9	3.9

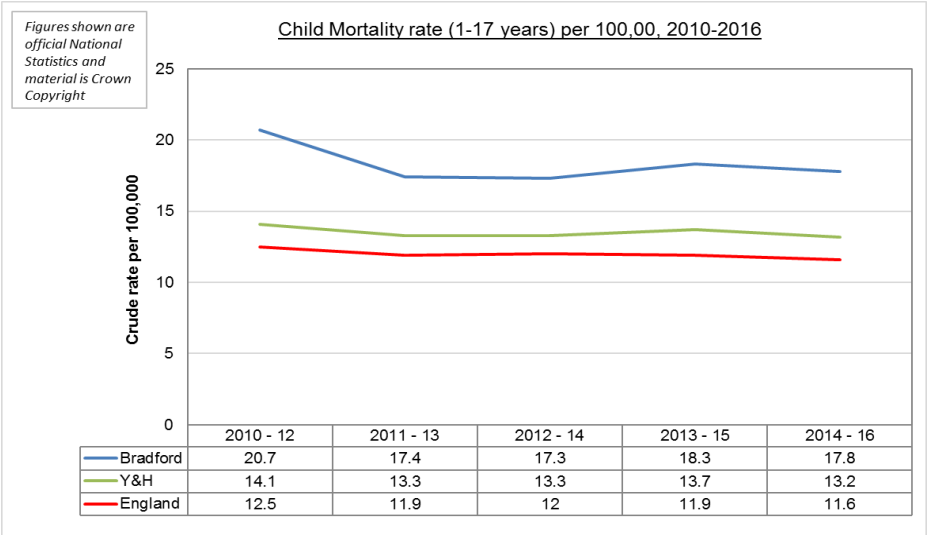
Source: Office for National Statistics (ONS) data

Figure 3: Infant mortality rates in the most deprived quintiles Bradford District, Region and England during 2007-09 to 2014-2016

Year	Bradford Most Deprived Quintile	Bradford	Yorkshire & Humber	England
2007-09	10.6	8.1	5.5	4.7
2008-10	10.2	7.9	5.4	4.6
2009-11	9.0	7.5	5.2	4.4
2010-12	7.8	7.0	4.8	4.3
2011-13	6.9	5.9	4.5	4.1
2012-14	6.6	5.8	4.2	4.0
2013-15	6.6	5.9	4.3	3.9
2014-16	*Data unavailable*	5.9	4.1	3.9
IMR change between 2007-09 and 2013-15	**-4.0**	**-2.2**	**-1.4**	**-0.8**

Source: Public Health Analysis Team, City of Bradford Metropolitan District Council, based on ONS data

Figure 4: Child Mortality Rates for Bradford District vs England and Yorkshire and The Humber, 2010-12 to 2013-15



	2010 - 12	2011 - 13	2012 - 14	2013 - 15	2014 - 16
Bradford	20.7	17.4	17.3	18.3	17.8
Y&H	14.1	13.3	13.3	13.7	13.2
England	12.5	11.9	12	11.9	11.6

Source: PHE, Child Health Profiles 2017

APPENDIX 5 (CDOP): CDOP activity and analysis of reviewed deaths

CDOP Activity

Figure 1: Number of notified and reviewed deaths, 2008/09-2017/18

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Notified deaths	85	108	108	70	68	66	80	61	68	58	**772**
Reviewed deaths	85	108	108	70	68	66	80	61	65	29	**740**
% of deaths reviewed	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**96%**	**50%**	**96%**

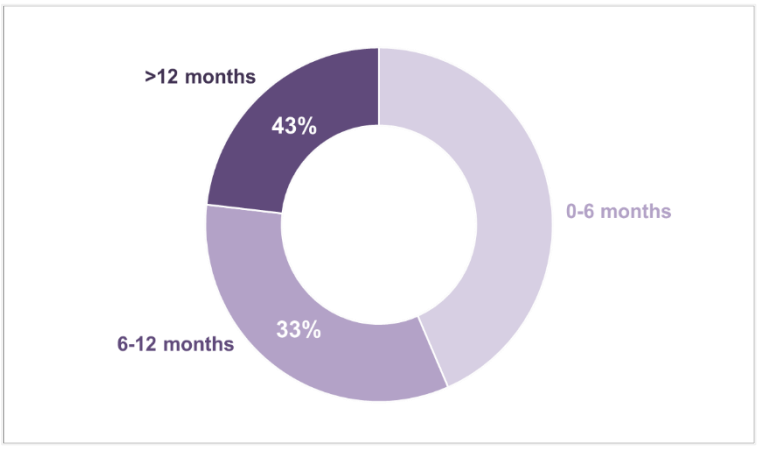
Source: Bradford CDOP review data

Figure 2: Numbers of deaths notified to the CDOP by age category and year of death, 2008/09 to 2017/18

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Under 1 year	63	77	74	44	45	47	50	41	47	40
1-17 year olds	22	31	34	26	23	19	30	20	21	18
TOTAL	**85**	**108**	**108**	**70**	**68**	**66**	**80**	**61**	**68**	**58**

Source: Bradford CDOP notifications data

Figure 3: Percentage of reviews completed within 12 months of the child's death – 2017/18



Source: Bradford CDOP review data

Analysis of deaths reviewed

Characteristics of the child deaths reviewed between April 2008 and March 2016[23].

Age

Figure 4: Age distribution of all reviewed deaths, 2008/09-2017/18

	Number	Percentage
Under 1 year	508	69%
1-17 years old	232	31%
TOTAL	**740**	**100%**

Source: Bradford CDOP review data

Figure 5: Age distribution of all reviewed infant deaths, 2008/09-2017/18

	Number	Percentage
Under 28 days	319	63%
28 days to 2 months	96	19%
3 months to 1 year	93	18%
TOTAL	**508**	**100%**

Source: Bradford CDOP review data

Figure 6: Age distribution of all reviewed child deaths, 2008/09-2017/18

	Number	Percentage
1-4 years old	96	41%
5-13 years old	80	34%
14-17 years old	56	24%
TOTAL	**232**	**100%**

Source: Bradford CDOP review data

Gender

Figure 7: Gender distribution of all reviewed deaths, 2008/09-2017/18

	Number	Percentage
Male	394	53%
Female	346	47%
TOTAL	**740**	**100%**

Source: Bradford CDOP review data

23 NB: Due to rounding, some percentage totals may not correspond with the sum of the separate figures.

Ethnicity

Figure 8: Ethnicity distribution of all reviewed deaths, 2008/09-2017/18

	Number	Percentage
South Asian	460	62%
White British	217	29%
Eastern European	25	3%
Mixed ethnicities	20	3%
Other ethnicities (includes African, East Asian, White Other and Other)	18	2%
TOTAL	**740**	**100%**

Source: Bradford CDOP review data

Figure 9: Ethnicity of all reviewed deaths by gender, 2008/09-2017/18

	% of deaths		
	Male	Female	Total
South-Asian	50%	50%	100%
White British	61%	39%	100%
All Other ethnicities	50%	50%	100%
ALL ETHNICITIES	**53%**	**47%**	**100%**

Source: Bradford CDOP review data

Category of death

Figure 10: Category of death distribution of all reviewed deaths, 2008/09-2017/18

	Number	Percentage
Category 1	7	1%
Category 2	7	1%
Category 3	34	5%
Category 4	26	4%
Category 5	23	3%
Category 6	24	3%
Category 7	318	43%
Category 8	227	31%
Category 9	43	6%
Category 10	28	4%
No category assigned	3	0%
TOTAL	**740**	**100%**

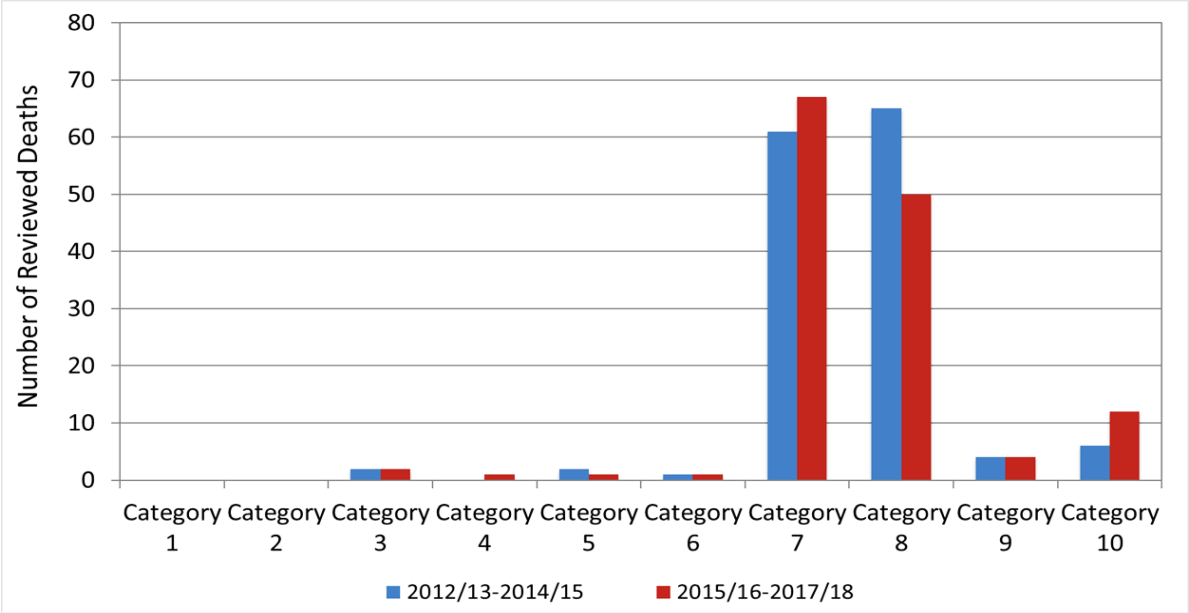
Source: Bradford CDOP review data

Figure 11: Comparison to national CDOP data: proportion of reviewed deaths by category of death, 2009/09–2017/18

Proportion of reviewed deaths by category of death		2016/17 National	2008/09-2017/18 Bradford	Difference *(percentage points)*
Cat 1:	Deliberately inflicted injury, abuse or neglect	1%	1%	**0**
Cat 2:	Suicide or deliberately inflicted self-harm	3%	1%	**-2**
Cat 3:	Trauma and other external factors	6%	5%	**-1**
Cat 4:	Malignancy	7%	4%	**-3**
Cat 5:	Acute medical or surgical condition	6%	3%	**-3**
Cat 6:	Chronic medical condition	5%	3%	**-2**
Cat 7:	Chromosomal, genetic and congenital anomalies	25%	43%	**18**
Cat 8:	Perinatal/neonatal event	34%	31%	**-3**
Cat 9:	Infection	6%	6%	**0**
Cat 10:	SUDI	7%	4%	**-3**

Source: National CDOP review data, and Bradford CDOP review data

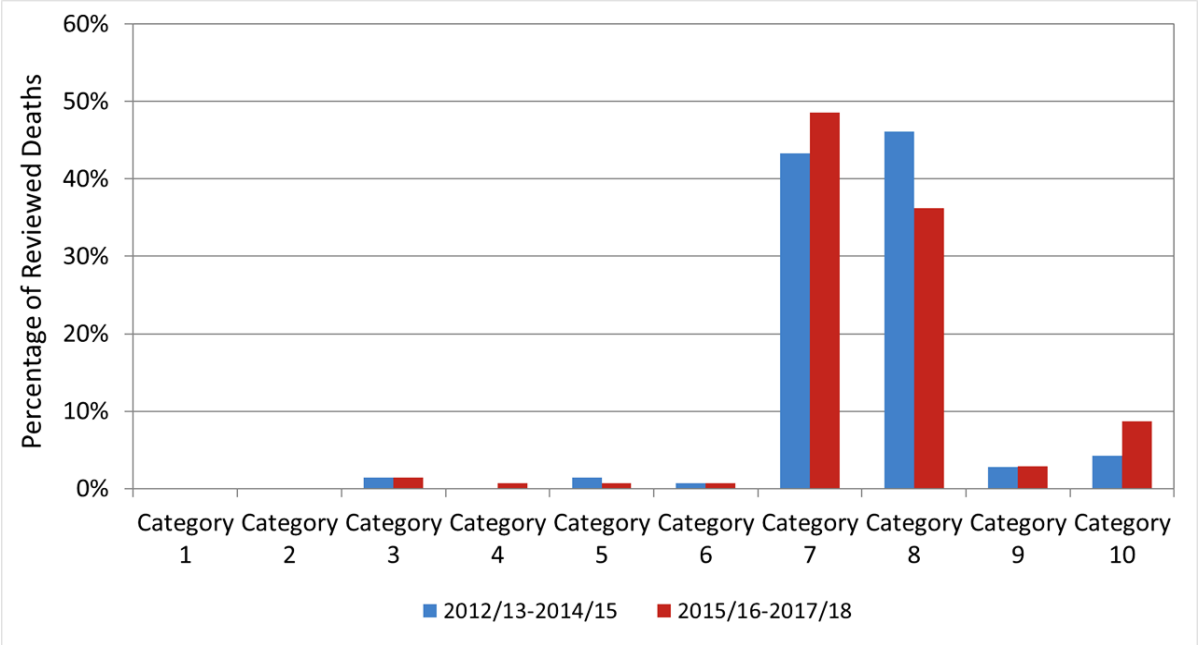
Figure 12: Numbers of reviewed infant deaths in each category of death, 2012/13-2014/15 compared to 2015/16-2017/18



Source: Bradford CDOP review data

NB: The deaths with inadequate information to make a category of death classification were removed from the analysis

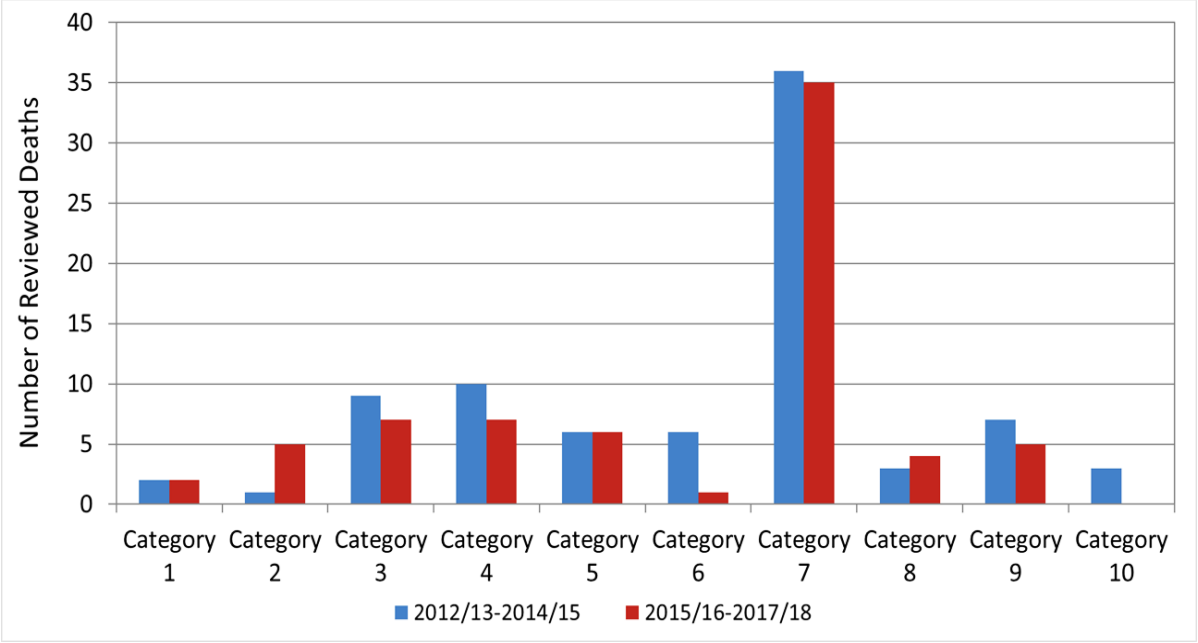
Figure 13: Proportion of reviewed infant deaths in each category of death, 2012/13-2014/15 compared to 2015/16-2017/18



Source: Bradford CDOP review data

NB: The deaths with inadequate information to make a category of death classification were removed from the analysis

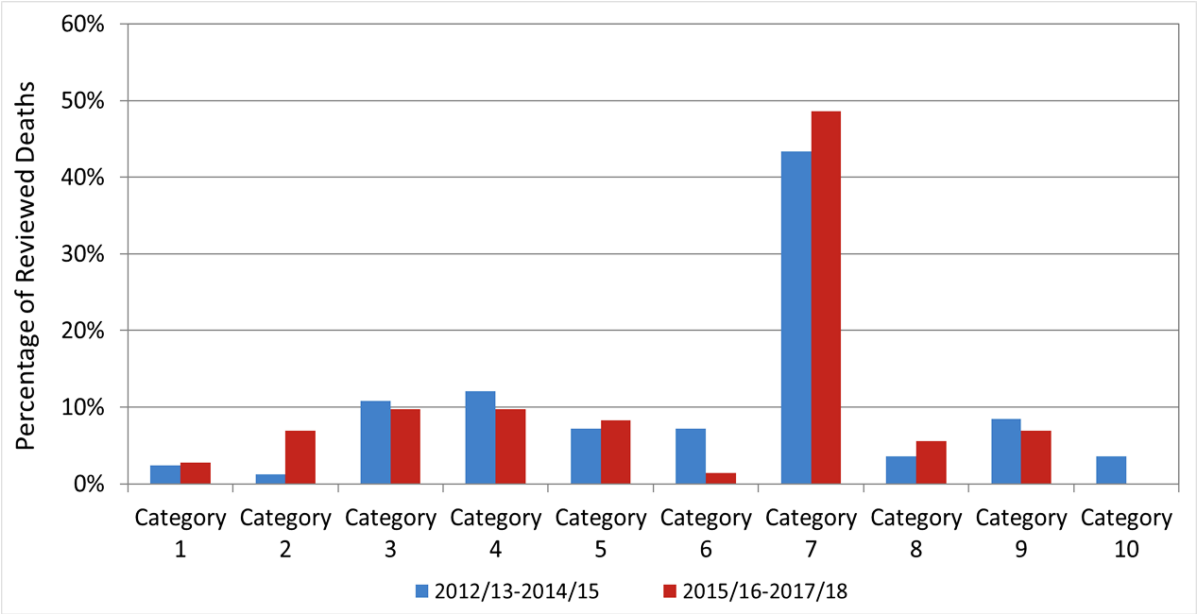
Figure 14: Numbers of reviewed child deaths (1-17 years old) in each category of death, 2012/13-2014/15 compared to 2015/16-2017/18



Source: Bradford CDOP review data

NB: The deaths with inadequate information to make a category of death classification were removed from the analysis

Figure 15: Proportion of reviewed child deaths (aged 1-17 years old) in each category of death, 2011/12-2012/13 compared to 2014/15-2016/17



Source: Bradford CDOP review data

NB: The deaths with inadequate information to make a category of death classification were removed from the analysis

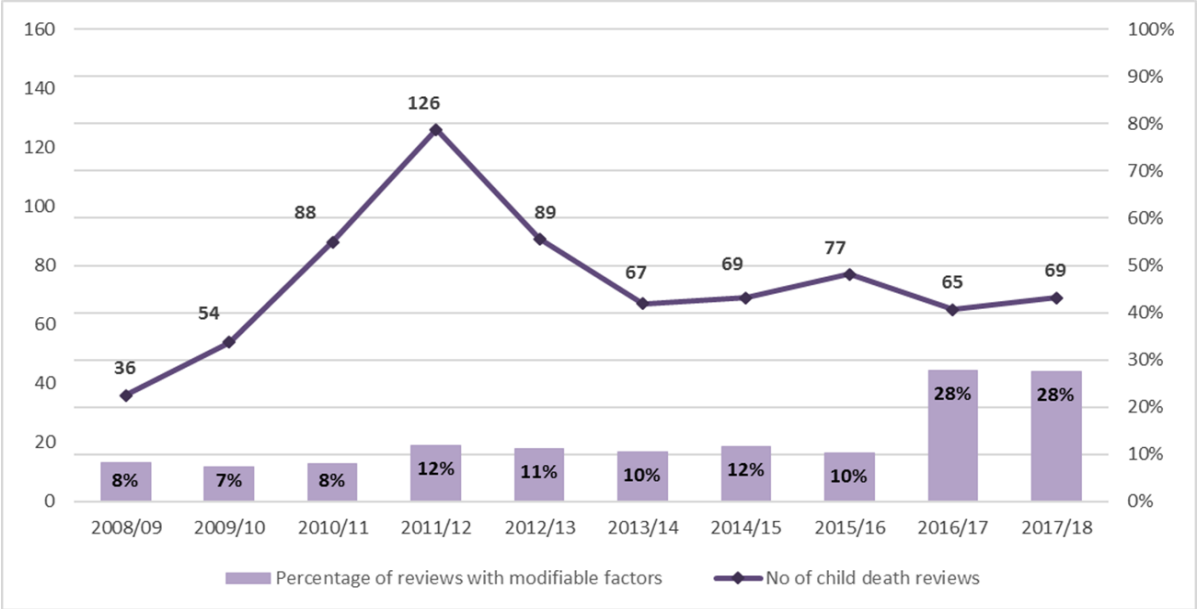
Modifiability

Figure 16: Modifiability classification of all reviewed deaths, 2008/09-2016/17

	Number	Percentage
Preventability/potentially preventable/modifiable	80	12%
Not modifiable	585	87%
Inadequate information	4	1%
Undecided	1	0%
TOTAL	**670**	**100%**

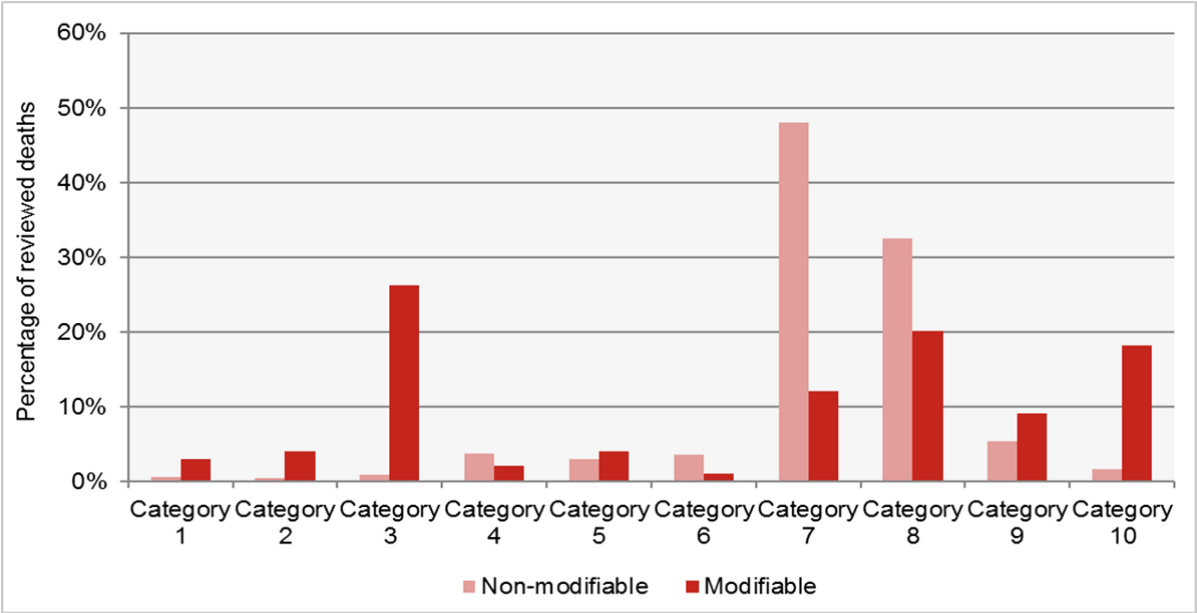
Source: Bradford CDOP review data

Figure 17: Percentage of reviews with modifiable factors 2008/09-2016/17



Source: Bradford CDOP review data

Figure 18: Percentage of modifiable/non-modifiable deaths by category 2008/09-2016/17



Source: Bradford CDOP review data

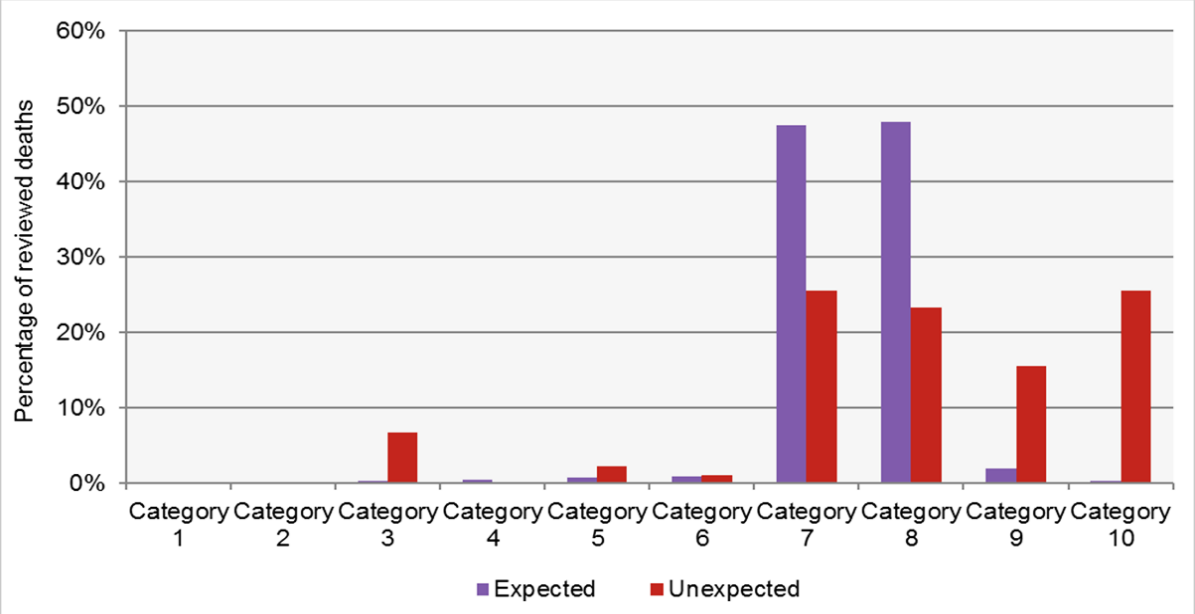
Expected/unexpected deaths

Figure 19: Expected/unexpected classification of all reviewed deaths, 2008/09-2017/18

	Number	Percentage
Expected	540	73%
Unexpected	194	26%
Unknown	6	1%
TOTAL	**740**	**100%**

Source: Bradford CDOP review data

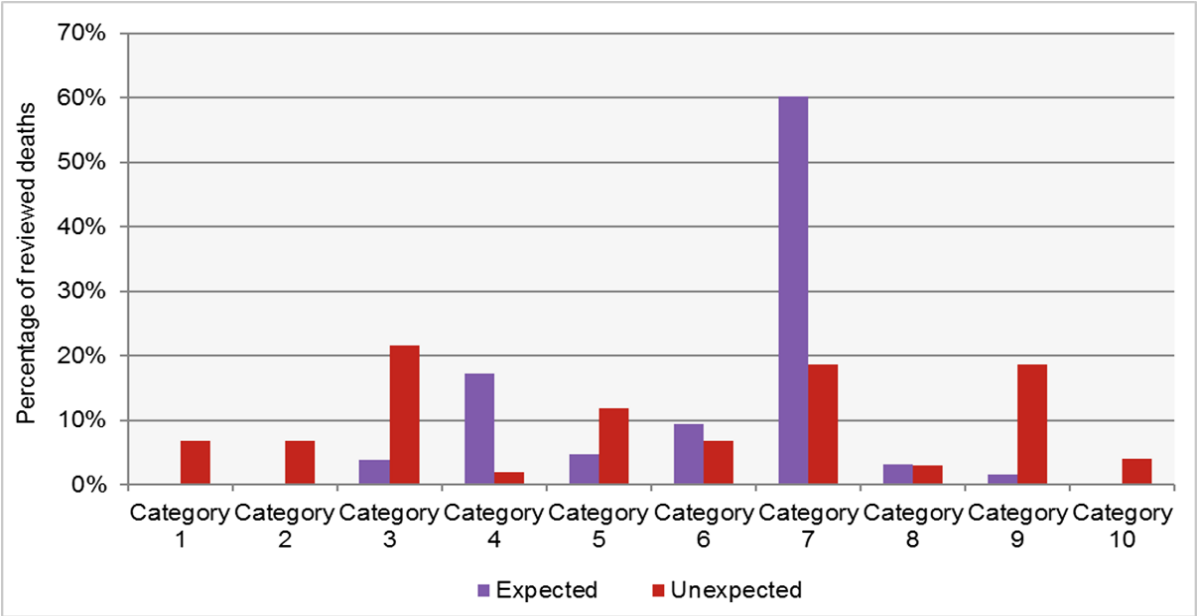
Figure 20: Proportion of expected/unexpected infant deaths in each category of death, 2008-2018



Source: Bradford CDOP review data

NB: The deaths with inadequate information to make a category of death classification were removed from the analysis

Figure 21: Proportion of expected/unexpected child deaths in each category of death, 2008-2017



Source: Bradford CDOP review data

NB: The deaths with inadequate information to make a category of death classification were removed from the analysis