# **Dudley Child Death Overview Panel (CDOP) Report 2017-18**

An analysis of the child deaths reviewed by Dudley CDOP in the year ending 31 March 2018

#### **Foreword**

Since April 2008 all deaths of children up to the age of 18 years, excluding still births and planned terminations, are reviewed by a Child Death Overview Panel (CDOP) to accommodate the national guidance and statutory requirement set out in Working Together to Safeguard Children 2015. The panel is multiagency with differing areas of professional expertise. This process is undertaken locally for all children who are normally resident in Dudley.

The important work of the Dudley Child Death Overview Panel continues into its 9th consecutive year, and though the themes emerging remain remarkably consistent, it is no less incumbent upon us all to work together to address the preventable causes of child death in the Borough.

Whilst the death of any child is a tragedy and thankfully rare, we need to take the opportunity to learn from these sad events. Dudley Safeguarding Children Board and CDOP members would like to extend condolences to all the families, carers and communities who have been affected by the pain of a child death.

Comprehensive reviews of child deaths undertaken by the Local Safeguarding Children Boards (LSCBs) serve a valuable public health function and by reviewing the circumstances surrounding the death of a child we can:

- provide information on child deaths that promotes action to help to prevent similar deaths in the future;
- share any learning with colleagues locally, regionally and nationally so that the findings will have a wider impact;
- analyse trends and targeted interventions delivered in response to these deaths.

This has been a productive year for Dudley's CDOP which has continued to benefit from strong partnership working. This report covers child death reviews conducted by Dudley CDOP between 1st April 2017 and 31st March 2018. Changes to the child death review process as articulated in Working Together 2018 will impact on the way in which child deaths are reviewed going forward.

As the interim chair of Dudley's CDOP I would like to thank all of the panel members for their dedication and commitment to the process and for reviewing all deaths with sensitivity and compassion. I would also like to offer my thanks to Paul Quigley and the Dudley MBC Intelligence Team for their valuable contribution in supplying and analysing the child death data and for their support in the preparation of the annual report.

#### Su Vincent

Designated Senior Nurse for Safeguarding Children and Interim Chair of Dudley CDOP

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## **Executive Summary**

- A total of 23 deaths were reviewed by the Child Death Overview Panel in Dudley between April 2017 and March 2018. The last two years represent rather high annual totals of child death reviews compared to previous years;
- Of the reviews in 2017-18, 13% were completed more than a year after the
  associated death, and almost half of the deaths reviewed actually took place
  before the start of the year in which they were reviewed. This is in line with or
  better than the national pattern of deaths and reviews;
- As in previous years, the two largest categories of death were: perinatal and neonatal events; and chromosomal and other anomalies. Together, these represented three in every five child deaths (61%), a proportion which is in line with the most recent figures at a national level;
- A number of deaths in Dudley six in the year to March 2018 were identified with factors which could be modified to reduce future child deaths. The current high proportion of deaths with modifiable factors in Dudley (27% and 26% in the last two years) is unprecedented in our records;
- A **rise in the identification of modifiable factors** is also shown in the data for the West Midlands Region and for England. This is likely to be the result of an improving ability to identify these factors;
- In cases in Dudley in 2017-18 where modifiable factors were identified, common factors which contributed or might have contributed to child deaths were: acute/sudden onset illness; co-sleeping; consanguinity; access to health care; and prior medical intervention;
- **Deaths of children under one year** accounted for three in every five of the child deaths reviewed in Dudley (61%) in the six years ending in 2017. In the latest year the proportion was slightly above this average at 65%, although in line with the equivalent figure of 64% at a national level:
- In recent years children dying in their first week of life have represented a
  progressively smaller share of the total dying in Dudley in their first year—this
  is the fifth year in a row in which this percentage has fallen and may reflect
  improving care in the perinatal period;
- Compared to the wider populations in Dudley, a relatively large number of child death reviews over the last five years have been of Black and Minority Ethnic children, and particularly of children of Asian origin. In the case of most of the deaths of Asian children in Dudley in 2017-18 consanguinity (i.e. where the parents were blood relatives) was identified as a possible contributory factor.

## INTRODUCTION

The Children Act 2004 first placed a statutory duty on local authorities in England to set up Local Safeguarding Children Boards (LSCBs). One of the LSCBs' functions has been to review the deaths of all persons under 18 years who are normally resident in their area via a Child Death Overview Panel (CDOP). This function became mandatory in April 2008, although LSCBs had been able to do this since 2006. The publication <u>Working Together to Safeguard Children (HM Government 2018)</u> sets out the current guidance to be followed by LSCBs and CDOPs and this new guidance will lead to changes in governance arrangements and the process going forward.

CDOPs were established to review every death of a child in an area<sup>1</sup>. In each area the Panel's purpose is to identify lessons that might improve the future safety and welfare of children, as well as any wider public health concerns arising from an individual or pattern of deaths. It is this latter objective which is the focus of this report.

In 2017/18 the Dudley CDOP met on six occasions to discuss child deaths, once more than in the previous year. This report summarises the findings of the child death reviews completed during the year 1 April 2017 to 31 March 2018 and, owing in part to the time elapsing between a death and the conclusion of its review, this is not the same as number of children who have died in Dudley within that period.

Of the 23 deaths reviewed in 2017-18 by Dudley CDOP, nearly half (eleven deaths) took place before 1 April 2017<sup>2</sup>. By the same token, a number of deaths which took place in 2017-18 have not been the subject of a completed review at the time of writing. As Table 1 shows, reviews completed in Dudley in 2017-18 were generally completed in less time than in England in 2016-17 (the latest year for which data was available at the time of writing).

The report starts by considering the national and regional context for the findings of the child death reviews in Dudley.

Table 1: Period between Death and Completion of Review

Child death reviews completed in Dudley in 2017-18, compared to England in 2016-17

Period between death and completion of review	Dudley 2017-18	England 2016-17	
Under 6 months 6 or 7 months 8 or 9 months 10 or 11 months 12 months Over one year	52% 17% 9% 9% 0% 13%	32% 16% 13% 11% 5% 24%	Sources: Child death reviews in Dudley 2017-18; Child death reviews: year ending 31 March 2017, Main tables SFR36/2017.  Note: Totals may not sum to 100% due to rounding

<sup>&</sup>lt;sup>1</sup> CDOP reviews currently exclude still births and those under 24 weeks gestation but this will change under new arrangements.

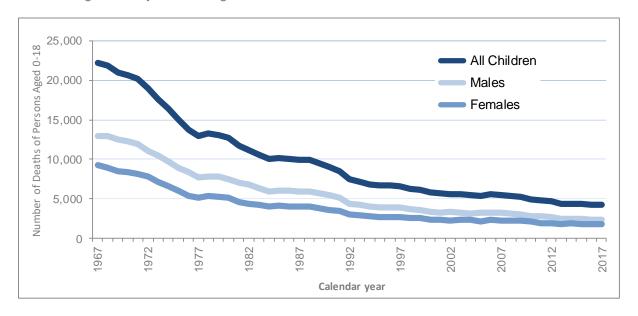
<sup>&</sup>lt;sup>2</sup> The proportion of deaths which were reviewed in Dudley in 2017-18 but took place before 1 April 2017 was smaller than in England in 2016-17 for example, i.e. 48% in Dudley in 2017-18 and 64% in England in 2016-17.

## **DEATHS OF CHILDREN: NATIONAL & REGIONAL TRENDS**

Although this report draws primarily on examination of child deaths considered by CDOP reviews, it is also useful to place this analysis in the context of wider data provided by the Office for National Statistics (ONS).

Figure 1: National Trend in Child Deaths

Persons aged 0-18 years in England and Wales from 1967 to 2017



Source: Office for National Statistics, Deaths by single year of age tables – UK (<a href="https://bit.ly/2RyPezT">https://bit.ly/2RyPezT</a>)

Information published by the Office for National Statistics shows 4,210 children under 19 had their deaths registered in 2017 (the most recent data available), continuing a long-term decline in the number of deaths of children under 19 in England and Wales over the last half century, as illustrated by Figure 1. The number of recorded deaths in this age group in 2017 showed a very slight decrease compared to the previous year (about a third of a percent).

In July 2018 national responsibility for the child death review policy of the UK Government was transferred from the Department for Education to the Department of Health and Social Care. One consequence of this is that the publication of national statistics on child death reviews during 2017-18 has been delayed and at time of writing they are not available<sup>3</sup>.

## **Common Categories of Death in England**

Although national data on CDOP reviews for the year ending in March 2018 is not available, we can nevertheless learn from the pattern of deaths in previous years.

Figure 2 illustrates the categories of child deaths reviewed over the latest five years for which data is available. Of a total of 18,143 deaths, the two largest categories were those

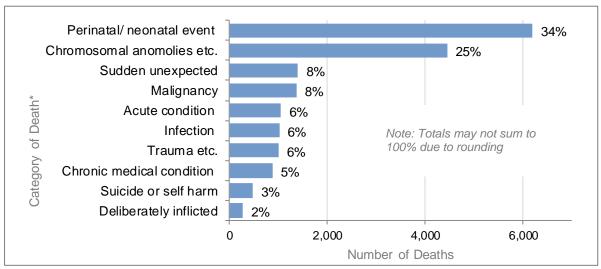
<sup>&</sup>lt;sup>3</sup> https://www.gov.uk/government/collections/statistics-child-death-reviews.

due to perinatal or neonatal events (34%) and chromosomal, genetic and congenital anomalies (25%). These proportions are similar to those in Dudley over the same period.

Reflecting the preponderance of perinatal and neonatal events among the categories of death, deaths reviewed in England are often within infancy. In 2016/17 for example, nearly two in every three deaths were within the first year of life, as illustrated by Figure 3.

Figure 2: Child Deaths Reviews in England by Category

All child death reviews completed in the five years ending 31 March 2017



<sup>\*</sup>The full titles of the categories defined by ONS are: 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; Unknown.

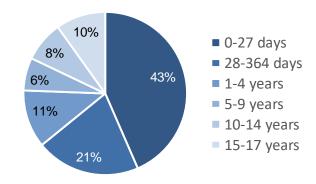
The total number of deaths represented in this chart excludes 22 which took place in the year ending 2013 and for which no information was available to determine whether factors contributing to the death were modifiable.

Source: NHS Digital, Statistics - Child Death Reviews (https://bit.ly/2AMRxdl)

# Figure 3: Age of Child at the Time of Death in England

All child death Reviews completed in the year ending 31 March 2017

Source: Department for Education, Child death reviews: year ending March 2017



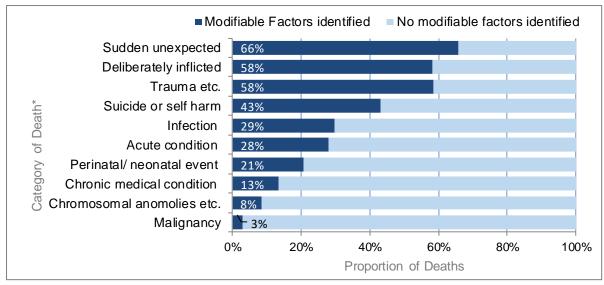
### **Modifiable Factors**

Since 1 April 2010, a requirement has existed to determine whether there were 'modifiable factors' in the death of a child when reviewing the death. Modifiable factors are defined as those which, by means of nationally or locally achievable interventions, could be modified to reduce future child deaths.

Of the child deaths reviewed in England over the five years to 2017, just less than a quarter (24%) were identified as having modifiable factors<sup>4</sup>.

Figure 4: Child Death Reviews in England by Category

All child death reviews completed in the five years ending 31 March 2017



\*The full titles of the categories defined by ONS are (in the order they appear in the chart): sudden unexpected, unexplained death; deliberately inflicted injury, abuse or neglect; trauma and other external factors; suicide or deliberate self-inflicted harm; infection; acute medical or surgical condition; perinatal/ neonatal event; chronic medical condition; chromosomal, genetic and congenital anomalies; and malignancy.

Source: NHS Digital, Statistics - Child Death Reviews (https://bit.ly/2AMRxdl)

Figure 4 shows how the cases with modifiable factors were distributed between different categories of deaths. The three categories with the highest percentage of modifiable factors in England were:

- sudden unexpected, unexplained death;
- deliberately inflected injury, abuse or neglect; and
- trauma and other external factors.

This illustrates that modifiable factors are more important in preventing deaths which have causes which might be thought of as less 'medical in their character, i.e. causes more obviously 'external' to the long-term health of the children concerned.

This is supported by other data at a national level: for the last year for which figures available (the year ending March 2017), the events that caused death with the highest percentage of identified modifiable factors were:

- Road traffic accidents/collisions (69% with modifiable factors);
- Drowning (64%)
- Apparent homicide (64%)

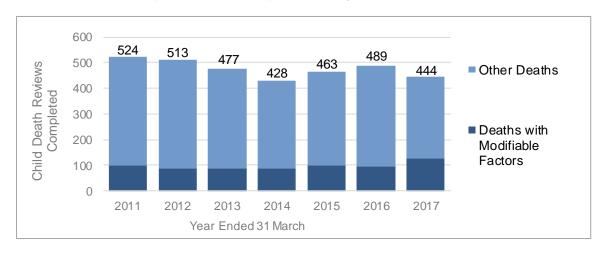
<sup>&</sup>lt;sup>4</sup> There were 20 deaths in 2017 where it was not known if there were modifiable factors. In 2016, there were 39 such deaths, in 2015, there were 31, in 2014 there were 40, and in 2013 there were 22.

Although these categories had high rates of modifiable factors associated with them, the actual numbers of deaths in these categories were relatively low. The largest of the categories above, road traffic accidents and collisions, covered 89 deaths—less than 3% of the total for that year.

As in the case of the national data, statistics on the number of child death reviews in the West Midlands region are not yet available for the year ending March 2018. However, by looking at the previous seven years overall, we can see a falling trend in the number of deaths reviewed, as illustrated by the chart in Figure 5. Deaths with identified modifiable factors represented 28% of the total in 2016-17.

Figure 5: Trend in Child Death Reviews in the West Midlands

Reviews completed by CDOPs, seven years ending 31 March 2017



Sources: Child death reviews: year ending 31 March 2017, Main tables SFR36/2017, Table 1; SFR23 2015, Table 1.

## **CHILD DEATH REVIEWS IN DUDLEY**

#### **Numbers of Deaths Reviewed**

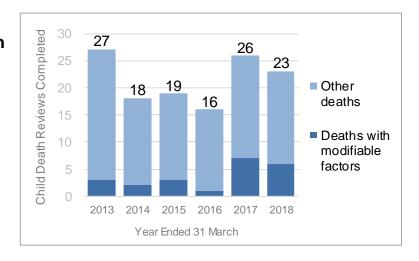
A total of 23 deaths were reviewed by the Child Death Overview Panel in Dudley between April 2017 and March 2018. This represented a small reduction on the previous year when 26 were reviewed. However, as illustrated by Figure 6, the latest two years represent relatively high annual totals of child death reviews compared to previous years. This may due in part to changes in workload of the Panel – the year 2016-17 in particular the Panel may have reviewed more deaths than usual from previous years.

Of the deaths reviewed in 2017-18, six were identified as having a modifiable factor, representing 26% of the total. Although this percentage is in line with the latest equivalent figures at a national and regional level, it is still relatively high for Dudley.

Figure 6: The Trend in Child Death Reviews in Dudley

Based on all child death reviews in the six years ending 31 March 2018

Source: Child Death Overview Panel Dudley



#### **Causes of Death**

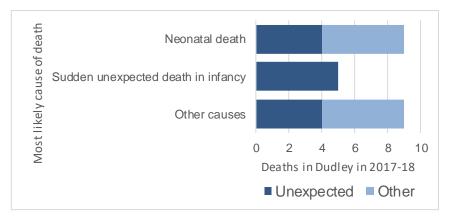
The most common categories assigned to deaths reviewed by the Dudley CDOP in the last six years have been Perinatal/neonatal events and chromosomal, genetic and congenital anomalies, each accounting for more than three in every ten deaths reviewed. In the year ending in March 2018, perinatal/neonatal events and chromosomal and other anomalies again accounted for the largest groups in Dudley, together representing nearly half of all death reviews (48%).

In addition to monitoring deaths by their category, child deaths are allocated to predefined causes. As illustrated by Figure 7, the two most common causes of deaths reviewed in Dudley in the year ending in March 2018 were Neonatal Death and Sudden Unexpected Death in Infancy (SUDI).

Figure 7: Child Death Reviews in Dudley by Most Likely Cause

Based on all child death reviews in the year ending 31 March 2018

Source: Child Death Overview Panel Dudley



## **Contributory Factors**

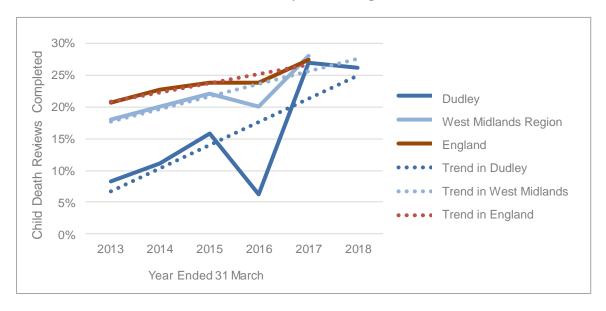
The form currently used to collect data on child deaths monitors 28 factors which might have contributed to any death subject to a CDOP review. Unfortunately, in the case of some factors, information was not available to the CDOP panel which would have allowed them to record whether the factor contributed to the death or not. In 2017-18, this was particularly the case for smoking during pregnancy and smoking in the household where, in 61% and 52% of deaths respectively, no information was recorded as to whether these factors might have contributed.

By far the most common factor contributing to child deaths in 2017-18 was acute or sudden onset illness which provided a 'complete and sufficient' explanation for 56% of deaths and may have contributed to others. Other more common factors were co-sleeping and consanguinity (i.e. where the parents were blood relatives) (which may have contributed to five deaths, 22% of the total). The five cases where consanguinity may have been a contributory factor were all children of Asian or Asian British ethnicity.

Since modifiable factors started being recorded (in 2010) there has been a national increase in the proportion of deaths for which they have been identified. This is also the case in Dudley, where the current high proportion of deaths with modifiable factors (27% and 26% in the last two years) is unprecedented in our records. However, this apparent increase is also reflected in the trends for the West Midlands Region and for England, shown in Figure 8. This increase is likely to be the result of an improving ability of CDOPs to identify modifiable factors.

Figure 8: Trends in the Percentage of Deaths with Modifiable Factors

Based on all child death reviews in the six years ending 31 March 2018



\*In the year ending 2016, the category of one death was unknown, and this death has not been included in this chart. In the year ending March 2017 one death was assigned two categories.

Sources: Child Death Overview Panel Dudley; NHS Digital, Statistics – Child Death Reviews (https://bit.ly/2AMRxdl).

In the case of the six deaths with identified modifiable factors in 2017-18, they were recorded in the categories of sudden unexpected deaths, infections, acute conditions, and chromosomal anomalies. Similarly, causes were recorded as sudden unexplained death in infancy, infection, and other.

## **Unexpected Deaths**

More than half (57%) of the deaths reviewed in the year ending in March 2018 were identified as unexpected (i.e. not expected to die within the 24 hours preceding the death).

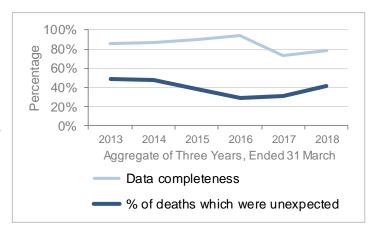
Figure 9 shows a rolling average of unexpected deaths as a percentage of all deaths. This shows that the long-term trend appears to be relatively stable, although this conclusion cannot be drawn with any degree of statistical confidence. In previous years there have been cases where data has not been recorded to say whether a death was expected or not and as a result, as Figure 9 illustrates, average data completeness for this measure has generally only been 80% or 90%. For the latest year however the data is 100% complete.

Among unexpected deaths reviewed in 2017-18, the causes were classified as: sudden unexpected death in infancy; neonatal death; known life limiting condition; apparent homicide; and other.

# Figure 9: Reviews of Unexpected Deaths in Dudley

Based on all child death reviews in the six years ending 31 March 2018

Source: Child Death Overview Panel Dudley



# **Child Deaths by Age and Sex**

Deaths considered by CDOPs are much more likely to occur at younger ages. Over the last decade for example, children have been more than 20 times more likely to die in Dudley in their first year than in the 17 subsequent years. Similarly, they have been more than 50 times more likely to die in their first week than in the rest of their first year.

Deaths of children under one year have accounted for three in every five of the child deaths reviewed in Dudley (61%) in the six years ending in 2017. In the latest year the proportion was slightly above this average at 65%, as illustrated by Figure 10, although in line with the equivalent figure of 64% at a national level (see Figure 3).

For the deaths under one year, Figure 11 shows the pattern of age at death for the latest year compared to each of the previous five years. In recent years children dying in their first week have represented a progressively smaller share of the total dying in their first year—this is the fifth year in a row in which this percentage has fallen. This may indicate better care in the perinatal period.

Of the fourteen deaths of children under one year which were reviewed in Dudley in 2017-18, very few were known to have been born at full-term (i.e. more than 36 weeks gestation). This should be viewed in the national context, where more than nine in every ten live births of more than 24 weeks gestation are full-term<sup>5</sup>.

For the year 2017-18 the child deaths reviewed in Dudley were born to mothers between the ages of 15 and 44. The distribution of cases by mother's age suggests that, among child death reviews in Dudley, there might be a disproportionate number of children born to older mothers, although the data from one year's reviews is not sufficient to show a statistically significant variation.

Over the last six years more male children have been subject to CDOP reviews in Dudley than females (54% to 46%). In the year ending in March 2018 eleven male deaths were reviewed and twelve female deaths. The larger number of male deaths is primarily accounted for by those in the first month of life (34 male deaths compared to 23 female deaths).

<sup>&</sup>lt;sup>5</sup> In 2016 for example, there were 692,627 live births in England and Wales at a gestation period of 24 weeks or more, of which 639,321 (92%) were born at full-term (Source: <u>birthcharactieristicsworkbook2016.xls</u>;

Figure 10: Reviews of Deaths of Children in Dudley Aged One Year or Less

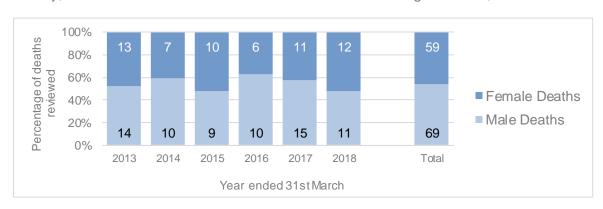
Years Ending 31st March



Source: Child Death Overview Panel Dudley

Figure 11: Child Deaths Reviews by Gender

Dudley, Based on All Child Death Reviews in the Years Ending 31 March, 2013 to 2018



Source: Child Death Overview Panel Dudley

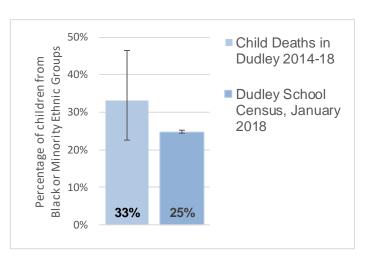
## **Child Deaths & Ethnicity**

Considering the last five years in total, the proportion of deaths of children in Dudley from Black and Minority Ethnic (BME)<sup>6</sup> groups has been 33%. This is proportionately higher than the number of BME pupils in the most recent Dudley School Census, for example, as illustrated by Figure 12, although it is not possible to show a statistically significant difference.

Figure 12: Black and Minority Ethnic Children

Child death reviews in the five years ending 31 March 2018, compared to the Dudley School Census in January 2018

Source: Child Death Overview Panel Dudley; Dudley School Census January 2018. Black and Minority Ethnic children are defined as being all those whose ethnicity was not in the category of 'White: English/Welsh/Scottish/ Northern Irish/British'.

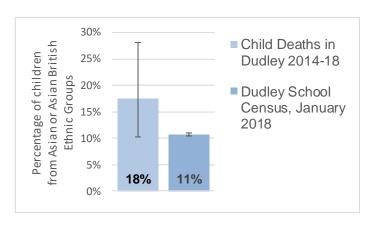


The largest of the minority ethnic groups represented in the local data on child deaths has been Asian children. Asian children represented 26% of all child death reviews in Dudley in 2017-18, a relatively high proportion of Asian child deaths compared to recent years. As many as 18% of child death reviews between 2014-18 have been of Asian children, which is a higher proportion than in the wider Dudley population (as measured by the Dudley School Census, for example), as illustrated in Figure 13.

Figure 13: Deaths of Asian Children

Dudley, based on all child death reviews in the five years ending 31 March 2018

Source: Child Death Overview Panel Dudley



<sup>&</sup>lt;sup>6</sup> The definition of BME used here includes all ethnic groups except for 'White: English/Welsh/Scottish/ Northern Irish/British'

# **Deaths by Location and Deprivation Level**

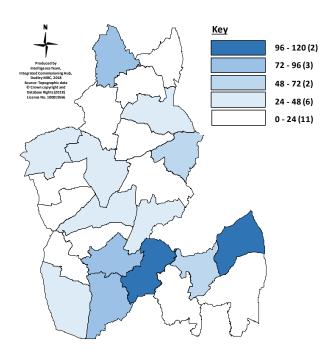
All the deaths in 2017-18 took place in an acute hospital, and two in every three occurred in an intensive care unit.

In the case of the most recent annual figures, more than half of the reviews were of deaths of children resident in either Halesowen or Stourbridge townships. Halesowen accounted for eight deaths, more than one in every three. Figure 14 illustrates that Halesowen North ward represented the highest mortality rate with 118 child deaths per 100,000 population under the age of 18. However, with the numbers of deaths in any one year being small this concentration is not necessarily of any statistical significance.

# Figure 14: Mortality Rates by Ward

Child death reviews in the year ending 31 March 2018 per 100,000 population aged under 18, based on postcode of residence

Sources: Child Death Overview Panel Dudley; Office for National Statistics Mid-Year Population Estimates 2017.



On the basis of the latest year's data alone, there is no evidence of a link between child deaths and the levels of deprivation in their area of residence. However the absence of a link is not unexpected given the small number of deaths overall, and it does not necessarily suggest that the evidence in Dudley contradicts studies elsewhere which have shown associations between child deaths and deprivation levels.

Recent improvements in the data collection processes in Dudley should mean that more accurate results will be available in future years.

## **ACHIEVEMENTS AND FUTURE DEVELOPMENTS**

#### Some achievements in 2017-18

- Last year was a stable year for child death reviews. The management of death
  notification and the role of CDOP nurse support was transferred from the Black
  Country Partnership Foundation Trust to Dudley Group of Hospitals. Partners
  worked very hard to reduce any negative impact on the review process. Furthermore
  Dudley CDOP is working closely with Sandwell CDOP to amalgamate the two
  panels;
- Dudley CDOP has successfully led the development of a bid to become an early adopter site for developing a Black Country strategic CDOP;
- In continuing with our advocacy role, Dudley CDOP has influenced the delivery of a sepsis campaign across the Borough, with specific focus on primary care and how to spot the early signs of sepsis. The panel also influenced the implementation of an adherence to sepsis protocol audit in primary care, and it expects to receive assurances on this from Dudley CCG on a regular basis;
- The panel oversaw the delivery of a water safety campaign across the Borough;
- Because we have started to see an increase in the number of sudden infant deaths, we have influenced the development of a multiagency operational group to look at the whole infant mortality agenda, including SUDI and safe sleep practice. The group is expected to feedback its progress on a regular basis;
- In executing its quality assurance role, the panel sought assurance from Dudley
  Urgent Care Centre on their triaging protocols for children under one year old. It also
  sought assurances from Queen Elizabeth Hospital (Birmingham) and Dudley Group
  of Hospitals on their protocols on consenting minors including the role of guardians in
  the process.

## **Future developments**

We are committed to influence the infant mortality agenda in Dudley.

On the system-wide front we are keen to work with colleagues across the Black Country to develop a strategic CDOP in order to:

- provide good quality data on causes of death and modifiable factors in domains related to the child and the wider system;
- develop novel approaches to linking hospital mortality review processes to CDOP reviews and undertake thematic reviews.