Annual report of the Bury, Oldham, and Rochdale Child Death Overview Panel

2023-2024 and 2024-2025

Dr Steven Senior

Consultant in Public Health

Chair of the Bury, Oldham, and Rochdale Child Death Overview Panel.

Table of Contents

Ex	ecutive summary	4
Su	mmary of recommendations	5
1.	Introduction and background	6
2.	The Child Death Overview Process	6
3.	Contents of this report	7
4.	Data protection	8
5.	Demographics of children and Young People in Bury, Oldham, and Rochdale	8
į	5.1 Population statistics	8
Ę	5.2 Births	9
į	5.3 Poverty and children in care	11
6.	Mortality statistics	13
7.	Notified deaths	15
7	7.1 Notified by local authority area of residence and year of death	15
7	7.2 Notified deaths by gender and year of death	17
7	7.3 Notified deaths by age at death	18
7	7.3 Notified deaths by ethnicity	19
7	7.4 Notified deaths by deprivation	20
8.	Analysis of deaths reviewed	21
8	3 .1 Numbers of deaths reviewed	21
8	3.2 Demographics of deaths reviewed	22
	8.3 Deaths reviewed by category of death, pre-existing conditions, and learning disa	
8	8.4 Deaths reviewed by presence of contributing factors	24
	Specific modifiable factors: maternal over/under weight	25
	Specific modifiable factors: consanguinity	25
	Specific modifiable factors: smoking, alcohol, and substance misuse	26
	Specific modifiable factors: unsafe sleeping arrangements	26
9.	Previous recommendations and actions	27
10.	Recommendations	27
Αp	pendix A: Child Death Overview Panel Responsibilities	29
An	pendix B: CDOP categories of death	30

List of tables:

Table 1: Numbers of 0-17 year olds in Bury Oldham and Rochdale by sex (Census 2021)	8
Table 2: Numbers of 0-17 year olds in Bury Oldham and Rochdale by ethnic category (Census 2021)	8
Table 3: Population projections for 0-19 year olds (ONS, 2018-based)	9
Table 4: deaths and death rates reported to CDOP by local authority and year	15
Table 5: deaths reported to CDOP by gender and year	17
Table 6: Deaths reported by age group	18
Table 7: Deaths and approximate rates by broad ethnic background	19
Table 8: Deaths and death rates by decile of deprivation	20
Table 9: Numbers of deaths reviewed by local authority and year reviewed	21
Table 10: Numbers of deaths reviewed by year reviewed and year of death	21
Table 11: Numbers of deaths notified to CDOP and reviewed by CDOP by year	21
Table 12: Number of deaths reviewed by age and gender	22
Table 13: Number of deaths reviewed by ethnicity	22
Table 14: Numbers of death by category of death	23
Table 15: Deaths reviewed where a pre-existing medical condition was present	23
Table 16: Deaths reviewed by whether the child had a diagnosed learning disability	24
Table 17: Deaths reviewed by modifiable factors contributing to deaths	24
Table 18: Deaths reviewed by age group and modifiable factors present	25
Table 19: Deaths reviewed where parents were known to be blood relatives	26
Table 20: Deaths where smoking, alcohol, or substance misuse issues were identified	26

Executive summary

- The Bury, Rochdale, and Oldham Child Death Overview Panel (CDOP) reviews all deaths of children normally resident in the three local authority areas.
- This report provides an analysis of deaths reported to CDOP and reviewed by CDOP in 2021/22, 2022/23, and 2023/24. It also includes key demographic data on the population of children in Bury, Rochdale, and Oldham, as well as data on important contributors to child mortality, such as rates of premature births, child poverty, and homelessness among families with children.
- Birth rates in Bury, Rochdale, and Oldham have fallen since 2016 but remain above average for England. The Office for National Statistics projects that the numbers of children living in the three local authority areas will be similar in 2030 to 2023.
- Numbers and rates of child deaths in Bury, Rochdale, and Oldham have fluctuated yearto-year but overall stayed constant. Child death rates have tended to be higher than average for England in Oldham and Rochdale while rates in Bury have been similar to the England average.
- Children living in areas of higher deprivation continue to be more likely to die, as are children from Asian ethnic background (potentially because they are more likely than White children to grow up in areas of deprivation). Rates of child poverty and homelessness have increased since 2020/21 in all three areas covered by this report.
- Along with the effects of poverty, CDOP continues to identify known, modifiable risk factors in its reviews of child deaths. 57% of deaths reviewed by CDOP between 2021/22 and 2023/24 had one or more risk factors identified. The most common category of modifiable factor were factors relating to the physical environment and factors relating to service provision (both present in 41% of deaths reviewed).
- Known modifiable risk factors identified in reviews of child deaths included:
 - Smoking, alcohol misuse, and substance misuse during pregnancy and in the households;
 - Unsafe sleeping arrangements, potentially linked to overcrowded housing or alcohol use by one or both parents; and
 - o Parents who are blood relatives, linked to 25.9% of deaths categorised as due to 'chromosomal, genetic, and congenital anomalies'.

Summary of recommendations

Based on the analysis of deaths reported to and reviewed by CDOP, as well as of the publicly available data presented above, this report recommends that:

- Child poverty: Health and Wellbeing Boards should note the worsening in measures
 of child poverty and to work with local partners to ensure that local antipoverty plans
 address increases in childhood poverty.
- Smoking, alcohol, and substance misuse: Health and Wellbeing Boards, with partners, should continue to work to reduce smoking, alcohol, and drug misuse in pregnancy by:
 - Ensuring smoking status and alcohol or substance misuse problems are identified early by ensuring that pregnant people are asked about smoking status, alcohol use, and substance use, that this information is recorded, and referrals to appropriate services are made; and
 - Continuing wider work to reduce the prevalence of smoking, alcohol misuse, and substance misuse across the population and ensuring provision of smoking cessation and drug and alcohol treatment services.
- Safe sleeping arrangements: Health and Wellbeing Boards, with partners, should
 continue to promote safe sleeping practices, noting the possible relationship between
 unsafe sleeping arrangements and overcrowded or otherwise inappropriate housing
 and with alcohol use by parents. Safeguarding partnerships should ensure for
 children who have additional vulnerabilities that are captured in child protection or
 child in need plan.
- Consanguinity: Health and Wellbeing Boards should work with partners and
 community organisations to raise awareness of the increased risk of death and
 illness faced by children born to parents who are close blood relatives and assure
 themselves that genetic counselling and testing services are being offered
 appropriately.

1. Introduction and background

The CDOP Annual Report is prepared to inform Child Death Review (CDR) Partners about local patterns and trends in child deaths, any lessons learned, actions taken, and the effectiveness of the broader child death review process. The report highlights relevant and modifiable factors contributing to the infant (under one year of age) and child (age 1-17 years) mortality rate in Bury, Rochdale, and Oldham. It also highlights.

The Bury, Rochdale, and Oldham CDOP is one of four CDOPs that make up the Greater Manchester (GM) CDOP Network:

- Manchester CDOP
- Bury, Rochdale & Oldham CDOP
- Bolton, Salford & Wigan CDOP
- Tameside, Trafford & Stockport CDOP

2. The Child Death Overview Process

The Bury, Rochdale, and Oldham Child Death Overview Panel (CDOP) reviews all deaths of children normally resident in the three local authority areas. This includes only live births and excludes stillbirths and legally terminated pregnancies. The panel may also review deaths of non-resident children who died in the local authority area. The panel operates under the Child Death Review Statutory and Operational Guidance. The chart below, taken from this guidance summarises the child death review process, and where CDOP sits in this process:

_

¹ Department for Health and Social Care (2018) <u>Child Death Review Statutory and Operational Guidance (England).</u>

Support for the family:
-engagement
-information

Child dies

Immediate decision making and notifications

Steps prior to review by CDR partners

Local and national learning shared e.g. to CDR &

safeguarding

partners

National Child

Mortality Database

information gathering

Child Death Review

Meeting

Independent review by CDR

Partners at Child Death

Overview Panel, or equivalent

Figure 1: The child death review process

Figure 1 Chart illustrating the full process of a child death review. This includes both the statutory responsibilities of CDR partners to review the deaths of children at an independent multi-agency panel (described here, and throughout, as review at CDOP or equivalent), and the processes that precede or follow this independent review. Further explanation is below.

As illustrated in figure 1, the focus of CDOP is on local and national learning. This involves looking for patterns between deaths and common 'modifiable factors' - things that could be changed to prevent future deaths. The purpose of CDOP is not to assure the preceding steps in the child death review process or to check that actions identified in reviews of specific cases have been taken. CDOP is accountable to the Health and Wellbeing Boards of the three local authority areas. Reports are also shared with local safeguarding partnerships. A full list of CDOP responsibilities is presented in Appendix A.

3. Contents of this report

-key worker

ocus on the individual

Focus on local and

national learning

This report contains:

- a. An overview of the demographics of children in Bury, Oldham, and Rochdale, including numbers of live births, fertility rates, and factors relating to child health such as rates of premature births, low birth weight, and poverty indicators.
- b. A summary of publicly available child mortality statistics.
- c. A description of numbers of deaths *notified* to CDOP between 1st April 2022 and 31st March 2023 and 1st April 2023 and 31st March 2024.
- d. Analysis of deaths *reviewed* by the CDOP between 1st April 2022 and 31st March 2023 and 1st April 2023 and 31st March 2024.
- e. A summary of recommendations of the previous CDOP report and any actions taken as a result.
- f. Recommendations for Health and Wellbeing Boards in Bury, Rochdale, and Oldham.

It is important to note that due to the length of the child death review process, deaths reviewed each year may not have happened or been notified to the panel in that year.

This report contains analysis of two financial years' CDOP data, 2022-23 and 2023-24.

4. Data protection

Data about children who die and the circumstances of their death is shared anonymously with the CDOP members. The panel is a confidential environment and panel members are aware of their obligation to treat information shared in meetings in confidence. Panel members and observers are required to sign confidentiality agreement. Every care has been taken in this report to make sure that no child can be identified from the data presented. Due to the personal nature of the underlying data it cannot be shared more widely.

5. Demographics of children and Young People in Bury, Oldham, and Rochdale

5.1 Population statistics

Table 1 provides the overall number of children aged 0-17 in Bury, Oldham, and Rochdale in the 2021 census. Children make up a higher proportion of the overall population in Oldham (25.6% of the population) than in Rochdale (24.3%) or Bury (22.6%). However, this can vary within local authorities.

	_		_		-		
Sex	Bury		Oldham		Rochdale		
Sex	No.	%	No.	%	No.	%	
Female	20,156	10.4%	29,196	12.1%	25,063	11.2%	
Male	21,597	11.1%	29,789	12.3%	26,774	12.0%	
Total	43,852	22.6%	61,953	25.6%	54,361	24.3%	

Table 1: Numbers of 0-17 year olds in Bury Oldham and Rochdale by sex (Census 2021)

Table 2 shows a breakdown of the ethnicities of children in each local authority area. Oldham has the highest proportion of children belonging to Black and ethnic minority backgrounds (47.87% of children), followed by Rochdale (38.82%) and Bury (16.93%). Across all three areas the largest ethnic minority category was 'Asian, Asian British, or Asian Welsh' although within this there was variation in what proportion identified as Pakistani, Bangladeshi, and other Asian backgrounds. Note: the total numbers of children in table 1 and 2 do not match. This is due to demographic data missing in the census data for a small number of children.

Table 2: Numbers of 0-17 year olds in Bury Oldham and Rochdale by ethnic category (Census 2021)

Ethnic category	Bury		Oldham		Rochdale	
Limic category	No.	%	No.	%	No.	%
Asian, Asian British or Asian Welsh	6,782	15.45%	21,700	35.02%	13,840	25.33%
Black, Black British, Black Welsh, Caribbean or African	1,164	2.65%	3,410	5.50%	3,164	5.79%
Does not apply	0	0.00%	0	0.00%	0	0.00%
Mixed or Multiple ethnic groups	2,688	6.12%	3,321	5.36%	2,914	5.33%
Other ethnic group	1,186	2.70%	1,235	1.99%	1,289	2.36%
White	32,067	73.07%	32,300	52.13%	33,424	61.18%
Grand Total	43,887	100.00%	61,966	100.00%	54,631	100.00%

Population projections from the Office for National Statistics (ONS) suggest that the 0–17-year-old population is expected to be broadly stable up to 2030, with forecast increases of between 1% and 3%. However, these projections are based on 2018 population estimates, and projections depend on accurately predicting birth rates, which may change.

Table 3: Population projections for 0-19 year olds (ONS, 2018-based)

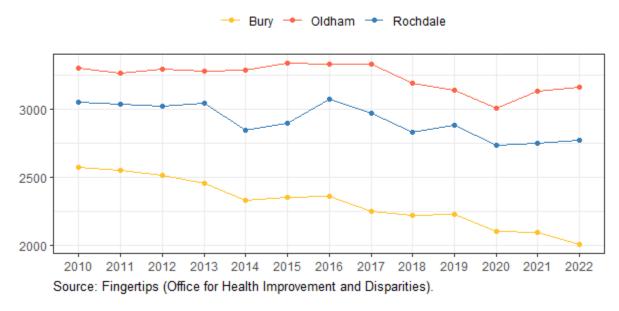
Area	Bury	Oldham	Rochdale
2023	35,490	48,641	43,977
2030	35,875	49,219	45,203
% Growth	1.1%	1.2%	2.8%

5.2 Births

Figure 2 shows the number of live births in Bury, Oldham, and Rochdale by year from 2010 to 2022. Numbers of births fell in all three areas over the 12-year period. The biggest fall was in Bury, where the number of live births fell from 2,571 to just over 2,008 (a 22% reduction in live births). The smallest fall was in Oldham, where the number of births fell from around 3,300 to 3,158 (around a 4% decrease).

Figure 2: Live births

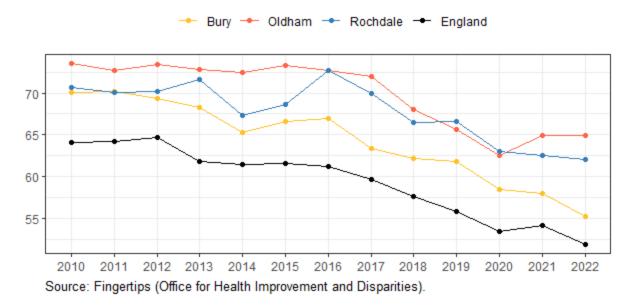
Live births 2010 to 2022



The general fertility rate gives a measure of the number of births relative to the number of females aged 15 to 44 (as very few births are to females aged under 15 or over 45). Figure 3 shows the general fertility rate for Bury, Rochdale, Oldham, and England for the same 12-year period. The national fertility rate fell from around 64 per 1,000 women per year in 2010 to 52 in 2022 (a 19% decrease). General fertility rates were higher in Bury, Rochdale, and Oldham than England over the whole period. However, fertility rates fell more sharply in Bury, reducing the gap in general fertility rates from 6 births per 1,000 females aged 15-44 to 3.4 births per 1,000 females aged 15-44. General fertility rates only fell by 12% in Rochdale and Oldham, with Oldham's general fertility rate increasing slightly from 2020.

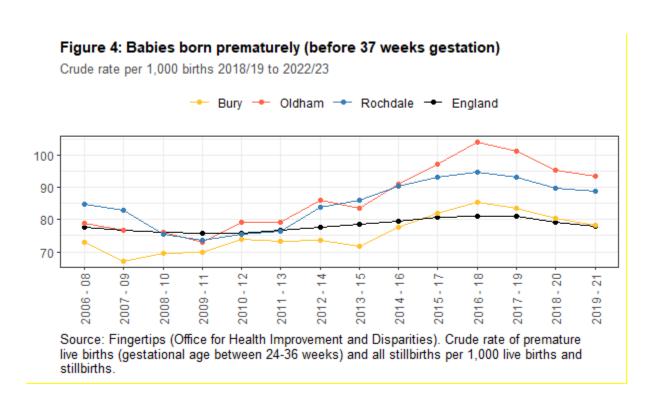
Figure 3: General fertility rate

Birth rate per 1,000 females aged 15 to 44 years 2010 to 2022



Babies born prematurely (before 37 weeks of gestation) often experience a range of poor health and other outcomes including higher risk of death. As well as being a cause of poor health in children, premature births are associated with poor maternal health, particularly smoking in pregnancy.

Rates of premature births are higher in Oldham and Rochdale than Bury and England. And while premature birth rates have remained roughly the same in Bury and England, rates of premature birth have increase in Oldham and Rochdale, starting from the 2010-12 period.

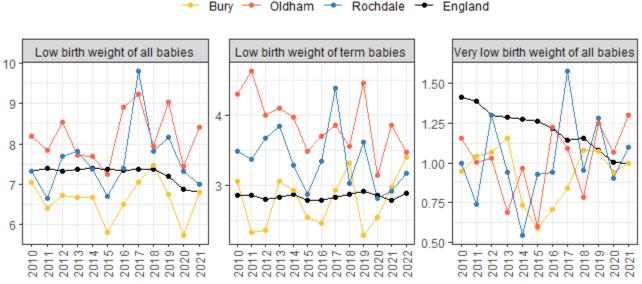


Children born at low birth weights (less than 2.5 kg) are also at higher risk of dying and poor health. Premature birth is one cause of low birth weights so separate indicators are available for babies born after 37 weeks of gestation as well as for all babies. Figure 5 shows babies born at less than 2.5kg as a percentage of all live births (left panel) and of all births of babies born after at least 37 weeks gestation (middle panel). The right panel shows the percentage of all babies born at very low birth weight (less than 1.5kg).

The numbers involved for Bury, Rochdale, and Oldham are small in each year and the data are noisy as a result. Rochdale and Oldham have tended to have a higher proportion of babies born at low birth weights, whereas Bury has tended to be similar to the national average. While England saw a decrease in the proportion of babies born at very low birth weight, no such trend exists for Bury, Rochdale, or Oldham.

Figure 5: Low birth weight babies

Percent of all births, 2014/15 to 2022/23



Source: Fingertips (Office for Health Improvement and Disparities). Babies are considered low birth weight if they weigh less than 2,500g at birth and very low birth weight if they weigh less than 1,500g. Babies are considered born at term if they are born after 37 weeks of gestation.

5.3 Poverty and children in care

Poverty is a major cause of child deaths and poor health. Families living in poverty often lack access to the basic building blocks of health, such as good quality housing, good diets, safe outdoor environments in which to plan and be physically active. Poverty also causes stress and mental illness, increasing the risk of childhood neglect or abuse or domestic violence. Families on low incomes are also more likely to be exposed to environmental hazards such as air pollution. And access to healthcare also tends to be worse for people living in poverty.

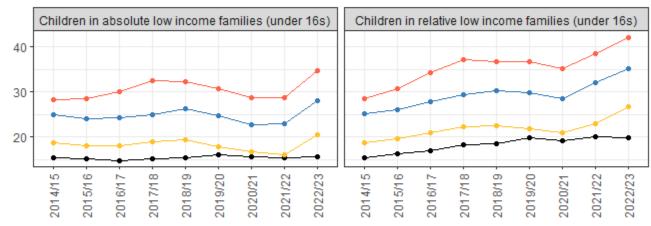
Figure 6 shows the proportion of children living in low-income families. Low income can be defined in absolute or relative terms. A household is in relative low income if household receives less than 60% of the median household income. A household in absolute low income is one which receives less than 60% of the median household income in 2010/11, updated to match inflation. This is designed to assess how low-income households are faring with reference to inflation. Figure 7 shows the number of households with children who are registered homeless per 1,000 households with children. Both child poverty and homelessness indicators have worsened markedly since 2020/21. Figure 8 shows the

numbers of children in care per 10,000 children. All three local authorities covered in this report have a greater proportion of children in care than the national average, particularly Rochdale. Bury and Oldham saw increases between 2018/19 and 2021/22 which reflect a national trend.

Figure 6: Proportion of children in low income families

Percent, 2014/15 to 2022/23

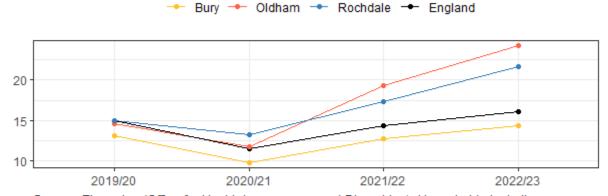




Source: Fingertips (Office for Health Improvement and Disparities). Percentage of children (under 16 years) in a local area. Absolute low income is defined as a family in low income Before Housing Costs (BHC) in the reference year in comparison with incomes in 2010 to 2011. A family must have claimed one or more of Universal Credit, Tax Credits or Housing Benefit at any point in the year to be classed as low income.

Figure 7: Homeless households with children

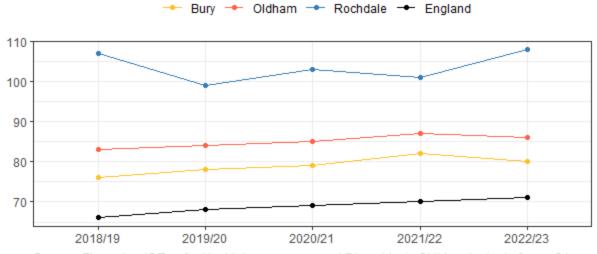
Rate per 1,000 households with children 2019/20 to 2022/23



Source: Fingertips (Office for Health Improvement and Disparities). Households including one or more dependent children owed a prevention or relief duty under the Homelessness Reduction Act, crude rate per 1,000 estimated households that include at least one dependent child. Children are dependent if they're under 18 and living at home. An 18 year old can also count as dependent if they're in full time education or can't support themselves for other reasons, and they live at home.

Figure 8: Children in care

Rate per 10,000 children 2018/19 to 2022/23



Source: Fingertips (Office for Health Improvement and Disparities). Children looked after at 31 March on the given year as a rate per 10,000 population aged under 18 years.

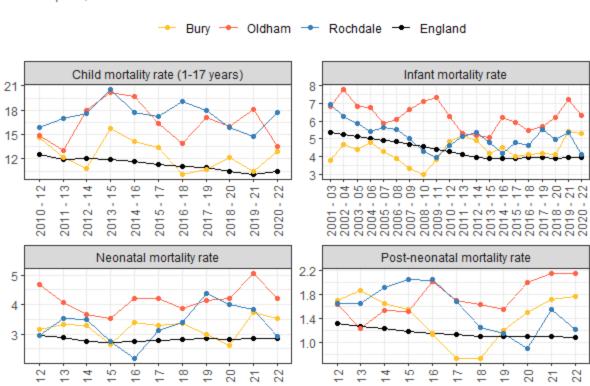
6. Mortality statistics

Figure 9 shows mortality rates for children aged 1 to 17 years, the infant mortality rate which reflects deaths in those aged 0 to 1 year old, the neonatal mortality rate which covers deaths in babies aged 0 to 28 days old and the post-neonatal mortality rate which covers deaths of babies aged 29 days to 1 year old. Due to the small numbers of deaths covered, trends are harder to discern. Oldham and Rochdale's child mortality rates have been higher than the national average in every period whereas child mortality in Bury has been closer to the national average throughout. Infant mortality rates in Oldham have been consistently higher than the national average, and both neonatal and post-neonatal mortality has contributed to this. Infant mortality in Rochdale appears to fall between 2001-03 and 2009-11 before levelling off or possibly increasing. Infant mortality in Bury was below or similar to the England average between 2001-03 and 2009-11 after which it has roughly followed the national trend, though with possible signs of an increase in 2019-21 and 2020-22.

Figure 10 shows the rate of deaths and serious injuries among children aged 0 to 15 years in road traffic accidents. These appear to have decreased slightly up to 2012-14 after which they have remained stable across all three areas.

Figure 9: Child, infant, neonatal, and post-neonatal mortality rates

Rate per 1,000



Source: Fingertips (Office for Health Improvement and Disparities). Child mortality rate: number of deaths in children aged 1 to 17 years per 1,000 population aged 1-17. Infant mortality rate: number of deaths in babies aged under 1 year per 1,000 live births in the same year. Neonatal mortality rate: the number of deaths in the first 28 days of life per 1,000 live births. Post-neonatal mortality rate: the number of deaths in babies aged 29 days to 1 year per 1,000 live births.

2013-

2014

2012

2017

2018

o

2016

ιO

2018

2019.

2017

Figure 10: Children aged 0-15 killed or seriously injured in road traffic accidents

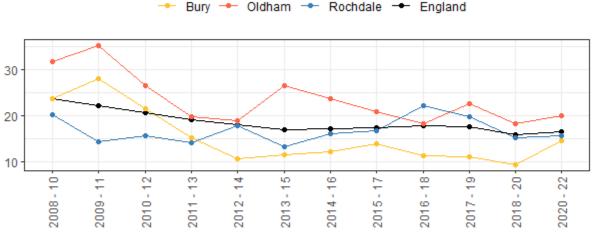
Rate per 100,000 children 2008-10 to 2020-22

ഗ ശ

2013-

201

201



Source: Fingertips (Office for Health Improvement and Disparities). The number of children aged 0-15 years that were killed or seriously injured in road traffic collisions per 100,000 population aged 0-15 years. Rolling three year averages.

7. Notified deaths

7.1 Notified by local authority area of residence and year of death

Table 4 shows the numbers of deaths reported to the Bury, Rochdale, and Oldham CDOP by local authority of residence and financial year in which the child died. As the number of deaths is related to the size of the population, the table also provides the population aged 0-17², the child mortality rate per 100,000 children, and 95% confidence intervals for the rate. Death numbers and rates are shown graphically in figures 11 and 12.

Table 4: deaths and death rates reported to CDOP by local authority and year

Financial year	Local authority	deaths	population	rate per 100k	95% confider interval	nce
2021/2022	Bury	18	43,767	41.1	24.4	64.9
2022/2023	Bury	15	43,906	34.2	19.1	56.3
2023/2024	Bury	12	44,046	27.2	14.1	47.5
2021/2022	Oldham	30	61,744	48.6	32.8	69.3
2022/2023	Oldham	35	62,439	56.1	39	77.9
2023/2024	Oldham	23	63,143	36.4	23.1	54.6
2021/2022	Rochdale	16	54,671	29.3	16.7	47.5
2022/2023	Rochdale	16	55,674	28.7	16.4	46.6
2023/2024	Rochdale	15	56,696	26.5	14.8	43.6

Due to the small numbers of deaths, differences between local authority areas and between different years are not statistically significant and could be due to chance variation. That important caveat aside, numbers and rates of deaths were consistently higher in Oldham across all three years in this report. Numbers of deaths decreased slightly in Bury between 2021/22 to 2023/24 and in Rochdale between 2022/23 and 2023/24.

-

² Population data were derived from the ONS mid-year population estimates tool. Population estimates were not available for 2023/24 so populations were estimated by extrapolating population growth from 2021/22 to 2022/23 in each area to the following year.

Figure 11: deaths reported by financial year of death

Bury, Oldham, and Rochdale. 2021/22 - 2023/24

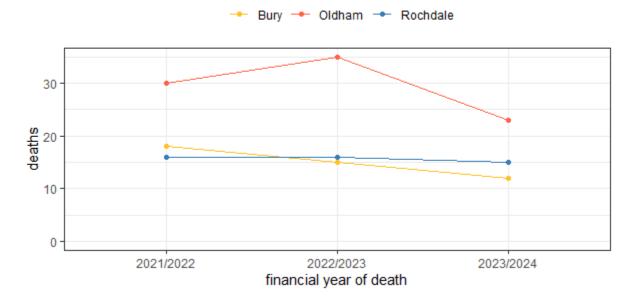
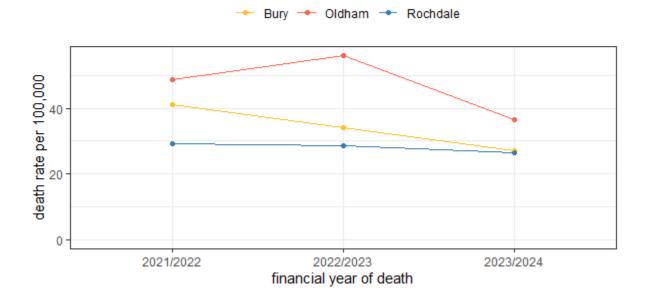


Figure 12: deaths rates per 100k by financial year of death



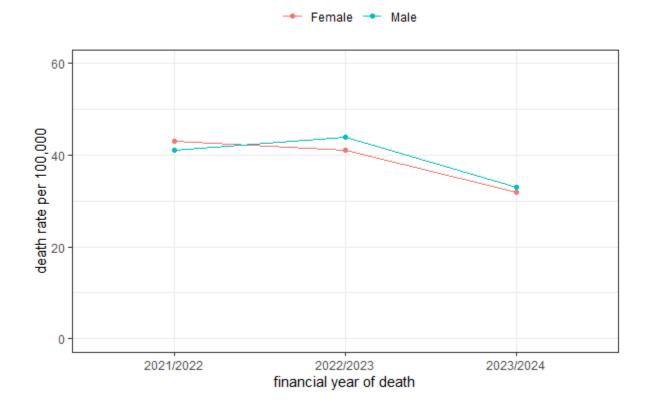
7.2 Notified deaths by gender and year of death

Table 5 shows deaths and death rates per 100,000 children by year and gender, combined across Bury, Rochdale, and Oldham. Numbers of deaths and death rates were similar between male and female children. A slight decrease in the number of deaths reported between 2022/23 and 2023/24 was seen in both male and female children, however this decrease may still be due to chance variation, rather than a meaningful reduction in child mortality rates. Figure 13 presents death rates by gender and financial year in which the child died.

Table 5: deaths reported to CDOP by gender and year Bury, Rochdale, and Oldham 2021/22 – 2023/24

Financial year	Gender	Deaths	Population	Rate per 100k	95% con inte	
2021/2022	Female	32	78,082	41	28	57.8
2022/2023	Female	31	79,028	39.2	26.6	55.7
2023/2024	Female	24	79,990	30	19.2	44.6
2021/2022	Male	32	82,100	39	26.7	55
2022/2023	Male	35	82,991	42.2	29.4	58.6
2023/2024	Male	26	83,895	31	20.2	45.4

Figure 13: deaths rates per 100k by gender and financial year of death



7.3 Notified deaths by age at death

Table 6 shows numbers of deaths reported in Bury, Rochdale, and Oldham between 2021/22 and 2023/24. Because numbers of deaths are small, the data are presented for all three years and all three areas combined. These data are presented graphically in figure 14.

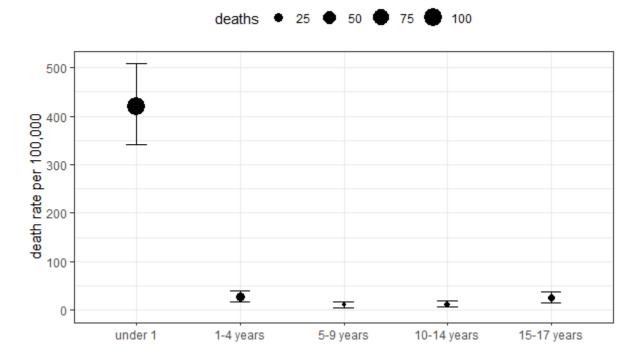
Numbers of rates of death were significantly higher in children aged under 1 year, consistent with national data that this is the time when the risk to a child's life is highest. A slight increase in death rates can be seen among 15-17 year olds, however the small numbers of deaths involved even after aggregating figures across years and local authority areas means it remains possible that this higher risk is a result of chance variation.

Table 6: Deaths reported by age group

Bury, Rochdale, and Oldham, 2021/22 to 2023/24

Age group	Deaths	Population	Rate per 100k	95% confidence interva	
under 1	103	24,564	419.3	342.3	508.5
1-4 years	27	10,1001	26.7	17.6	38.9
5-9 years	14	13,6383	10.3	5.6	17.2
10-14 years	16	14,2223	11.2	6.4	18.3
15-17 years	20	82,066	24.4	14.9	37.6

Figure 14: deaths rates per 100k by age at death



7.3 Notified deaths by ethnicity

Table 7 shows death numbers and approximate rates³ by ethnic category for Bury, Oldham, and Rochdale from 2021/22 to 2023/24. Death rates are presented graphically in figure 14.

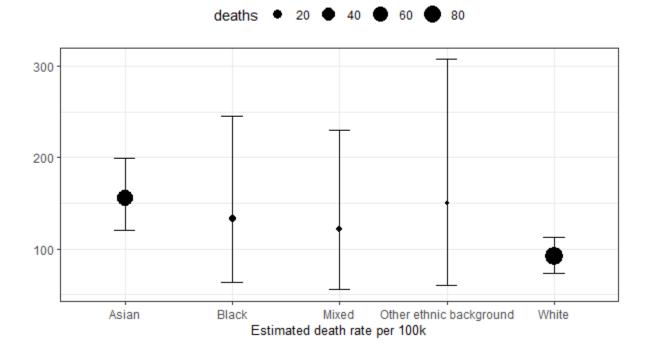
Although there were more deaths among White British children, death rates were higher for most other ethnic groups. Small numbers mean that in most cases the apparent higher cases may be due to chance variation, except for children of Asian ethnic backgrounds where death rates appear to be significantly higher than for their White British counterparts. This was mainly driven by deaths of children of Pakistani ethnicity.

Table 7: Deaths and approximate rates by broad ethnic background Bury, Rochdale, and Oldham, 2021/22 – 2023/24

Ethnic category	Deaths	Population	Rate per 100k	95% confidence interv	
White	89	97,087	91.7	73.6	112.8
Asian	65	41,672	156	120.4	198.8
Black	10	7,484	133.6	64	245.1
Mixed	9	7,398	121.7	55.5	230.2
Other ethnic background	7	4,672	149.8	60	307.2

Figure 14: deaths rates per 100k by age at death

Bury, Oldham, and Rochdale. 2021/22 - 2023/24



3

³ Mid-year population estimates are not available by ethnicity and age. The nearest data that are available are from the 2021 census which gives an age and ethnicity breakdown of the census population. The rates have been calculated by dividing the number of deaths in each ethnic category over the three years 2021/22 to 2023/24 by three times the combined 0-17 populations for Bury, Rochdale, and Oldham.

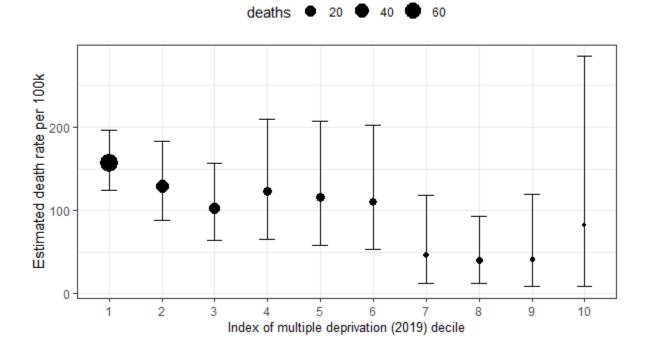
7.4 Notified deaths by deprivation

The Index of Multiple Deprivation gives a measure of the deprivation experienced by populations living in small areas (lower super output areas, with populations of around 1,500). Table 8 shows the number of notified deaths by decile of deprivation. More children died in areas of higher deprivation than in less deprived areas. However, the combined population of Bury, Rochdale, and Oldham is more deprived than England as a whole. This is reflected in greater numbers of children living in deciles 1, 2, and 3. Nevertheless, death rates were higher in the more deprived areas than in less deprived areas, with a decreasing trend in death rates from most to least deprived. This reflects the effects of poverty and higher rates of low birth weight, homelessness, and other risks described in section 5 above in these areas. These data are presented graphically in figure 14.

Table 8: Deaths and death rates by decile of deprivation, Bury, Rochdale, and Oldham, 2021/22-2023/24

IMD (2019) decile	Population	Deaths	Rate per 100k	95% Confidence	
	aged 0-17			interval	
1 (most deprived)	49,084	77	156.9	123.8	196.1
2	24,689	32	129.6	88.6	182.9
3	20,425	21	102.8	63.6	157.1
4	10,606	13	122.6	65.2	209.3
5	9,488	11	115.9	57.8	207
6	9,066	10	110.3	52.8	202.3
7	8,558	4	46.7	12.6	118.1
8	12,474	5	40.1	12.9	92.7
9	7,202	3	41.7	8.4	119.1
10 (leastdeprived)	2,431	2	82.3	9.2	284.9

Figure 14: deaths rates per 100k by age at death



8. Analysis of deaths reviewed

8 .1 Numbers of deaths reviewed

This section describes the activity of the Bury, Rochdale, and Oldham CDOP for the financial years 2021/22, 2022/23, and 2023/24 in terms of numbers of child deaths reviewed. Because the deaths reviewed in these years happened between 2017/18 and 2021/22 and the population denominators changed over that time, it is not appropriate to express numbers of deaths as rates. For this reason, this section only counts of deaths reviewed are presented.

Table 9 gives the number of deaths reviewed by the local authority area in which the child was living at the time they died and the financial year in which the death was reviewed.

		_	-	-
Year reviewed	Bury	Oldham	Rochdale	Total
2021/22	9	21	14	44
2022/23	8	19	8	35
2023/24	15	18	17	50
Total	32	58	39	129

Table 9: Numbers of deaths reviewed by local authority and year reviewed

Due to the variable length of the child death review process, many CDOP reviews do not happen in the year in which the child died. Table 10 shows the numbers of deaths reviewed by year the child died and the year the CDOP review was completed.

	Year of death								
Year reviewed	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	Total			
2021/22	1	9	29	5	0	44			
2022/23	1	9	14	11	0	35			
2023/24	2	1	15	15	17	50			
Total	4	19	58	31	17	129			

Table 11 shows the number of child deaths notified to CDOP and the number of child deaths reviewed each year for 2021/22 to 2023/24.

Table 11: Numbers of deaths notified to CDOP and reviewed by CDOP by year

Year	Deaths notified	Deaths reviewed
2021/2022	64	44
2022/2023	66	35
2023/2024	50	50

The number of child deaths notified to CDOP each year exceeded the number of deaths reviewed 2021/22 and 2022/23. As a result, a backlog of unreviewed cases has built up. As of the 31st of March 2024, the backlog stood at 168 cases. This has been a result of both

limited CDOP officer capacity, limited panel time, impacts of COVID-19 on child death review processes in 2020 and 2021, and delays in receiving key information from partners.

In response CDOP panel meetings for Bury, Rochdale, and Oldham have been extended from half days to full days. This has increased the numbers of cases reviewed per panel to 15 in March 2024 and 17 in June 2024. This contributed to the increase in cases reviewed in 2023/24. If continued, this provides capacity to review 60-70 cases per year.

8.2 Demographics of deaths reviewed

Table 12 presents the numbers of child deaths reviewed by the Bury, Rochdale, and Oldham CDOP. Table 13 presents the numbers of child deaths reviewed by the Bury, Rochdale, and Oldham CDOP by ethnic category.

Table 12: Number of deaths reviewed by age and gender Bury, Rochdale, and Oldham, 2021/22 – 2022/23

Age Group	Female deaths	Male deaths	Total
0-27 days	27	23	50
28-364 days	9	23	32
1-4 years	4	6	10
5-9 years	3	4	7
10-14 years	4	10	14
15-17 years	6	10	16
Total	53	76	129

Table 13: Number of deaths reviewed by ethnicity Bury, Rochdale, and Oldham, 2021/22 - 2022/23

Ethnic category	Deaths reviewed
White	63
Asian	38
Ethnicity not known	12
Black	11
Mixed	3
Other ethnic background	2
Total	129

8.3 Deaths reviewed by category of death, pre-existing conditions, and learning disability

All CDOP panels use a standard set of categories of death to describe the broad cause of death based on the information available to them. A list of the standard categories of death is provided in Appendix B. The most common category of death was 'perinatal/neonatal event'. This includes deaths due to consequences of prematurity, adverse events during delivery, and congenital or early onset bacterial infections. Although this was the most common cause when deaths across the three areas were combined and for Oldham and Bury, the most common category of death for Rochdale was 'chromosomal, genetic, and congenital anomalies'. This was the second most common category of death for Oldham and Bury. It includes deaths due to extra copies of chromosomes, single gene disorders, cystic fibrosis, congenital heart anomalies, and neurodegenerative conditions.

Table 14: Numbers of death by category of death, Bury, Rochdale, and Oldham, 2021/22 - 2023/24

Catagory of dooth	Bury		Rochdale		Oldham		Total
Category of death	n	%	n	%	n	%	iolai
Perinatal/neonatal event	11	34.4	9	23.1	23	39.7	43
Chromosomal, genetic and congenital anomalies	3	9.4	12	30.8	12	20.7	27
Trauma and other external factors, including medical/surgical complications/error	3	9.4	5	12.8	6	10.3	14
Sudden unexpected, unexplained death	4	12.5	3	7.7	5	8.6	12
Chronic medical condition	1	3.1	2	5.1	5	8.6	8
Malignancy	3	9.4	1	2.6	2	3.4	6
Acute medical or surgical condition	0	0	3	7.7	2	3.4	5
Infection	2	6.2	2	5.1	1	1.7	5
Suicide or deliberate self-inflicted harm	3	9.4	0	0	2	3.4	5
Deliberately inflicted injury, abuse or neglect	2	6.2	2	5.1	0	0	4
Total	32	100	39	100	58	99.8	129

As shown in table 15 of the 129 deaths reviewed over the three years from April 2021 to March 2024, 52 were of children with pre-existing medical conditions. This represents 40.3% of all deaths. This does not mean that the pre-existing medical condition was the cause of death, though this is likely to be the case for those deaths categorised as due to chronic medical conditions or chromosomal, genetic and congenital anomalies.

Table 15: Deaths reviewed where a pre-existing medical condition was present Bury, Rochdale, and Oldham, 2021/22 - 2023/24

Pre-existing medical condition	Deaths	Percent
Yes	52	40.3%
No	29	22.5%
Not known	29	22.5%
Not Applicable	19	14.7%

Table 16 shows the numbers and percentage of deaths by whether the child had a diagnosed learning disability. In most cases (nearly 60%) this is category was not applicable, in most cases because the child was too young for a learning disability to be diagnosed: of the 77 child deaths where learning disability status was 'not applicable' 45 were neonates aged under 28 days, 28 were aged under 1 year, and 4 were aged 1-4 years old.

Table 16: Deaths reviewed by whether the child had a diagnosed learning disability

Bury, Rochdale, and Oldham, 2021/22 – 2023/24

Learning disability	Deaths	Percent
Yes	14	10.90%
No	19	14.70%
Not known	19	14.70%
Not applicable	77	59.70%

8.4 Deaths reviewed by presence of contributing factors

The main purpose of CDOP is to identify factors that contributed to the deaths of children reviewed with a focus on common modifiable factors that could be changed to prevent other children from dying in future.

Potentially modifiable factors contributing to deaths are grouped into four 'domains':

- **Domain A:** factors intrinsic to the child, such as low birth weight, genetic or chromosomal abnormalities, or poor maternal health.
- **Domain B:** factors in social environment including family and parenting capacity. This includes smoking, drug use, and domestic violence in the household as well as wider social risks, such as issues with peer groups or at school.
- **Domain C:** factors in the physical environment, such as inadequate or absent safety equipment or access to open water.
- **Domain D:** factors in service provision, such as when a service fails to follow its procedures and guidance, or when two or more services fail to communicate or work together appropriately.

However, the presence of these factors does not necessarily mean that factor could have been modified in that case. CDOP makes a judgement on whether each factor was modifiable or not. Table 17 presents numbers and percentages of deaths where modifiable factors were identified by CDOP.

Table 17: Deaths reviewed by modifiable factors contributing to deaths

Bury, Rochdale, and Oldham, 2021/22 – 2023/24

Factors present	Any factors	Domain A	Domain B	Domain C	Domain D
Present	73 (57%)	22 (17%)	41 (32%)	21 (16%)	41 (32%)
Absent	56 (43%)	107 (83%)	88 (68%)	108 (84%)	88 (68%)

Potentially modifiable factors contributing to deaths were identified in 73 (57%) of 129 deaths reviewed by the Bury, Rochdale, and Oldham CDOP between April 2021 and March 2024. Factors in domain B (relating to the social environment) and domain D (relating to service

provision) were most common, identified in 32% of deaths. Table 18 shows the proportion of deaths reviewed where potentially modifiable factors were identified broken down by age group. This shows some variation in which domains potentially modifiable factors identified fell into by age group, however the small numbers of deaths in each age group over the three years means that any variations need to be treated with caution. But the relative scarcity of factors relating to the physical and social environments in neonatal deaths is plausible as many of these children never leave hospital following birth.

Proportions of deaths with modifiable factors in each of the four domains did not vary by local authority, so these data are not presented.

Table 18: Deaths reviewed by age group and modifiable factors present

Bury, Rochdale, and Oldham, 2021/22 – 2023/24

Age Group deatl		Domain A factors present		Domain B factors present		Domain C factors present		Domain D factors present	
		n	%	n	%	n	%	n	%
0-27 days	50	12	24	10	20	2	4	18	36
28-364 days	32	4	12.5	15	46.9	9	28.1	6	18.8
1-4 years	10	1	10	4	40	2	20	5	50
5-9 years	7	0	0	3	42.9	2	28.6	2	28.6
10-14 years	14	3	21.4	5	35.7	2	14.3	3	21.4
15-17 years	16	2	12.5	4	25	4	25	7	43.8

Specific modifiable factors: maternal over/under weight

Both high and low maternal bodyweight is associated with increased risk of child death. Mechanisms involved include higher risk of birth asphyxia in children of mothers with BMIs greater than 30 and at higher levels of obesity increased risk of congenital anomaly.⁴

Low maternal BMI was not identified in any deaths reviewed during this reporting period. High maternal BMI was identified as a factor in 11 deaths (8.5% of all deaths reviewed), 10 of which were neonatal deaths.

Specific modifiable factors: consanguinity

Genetic relatedness (consanguinity) between parents increases the risk of congenital abnormalities and early child death. This is in part due to the higher risk of severe autosomal recessive diseases (where two copies of the disease-causing gene are needed for the disease to occur)⁵.

Table 19 shows deaths reviewed broken down by whether the parents of the child were known to be blood relatives. Of the 126 deaths reviewed by CDOP over the three years from 2021/22 to 2023/24, 17 (13.2%) were of children born to parents who were known to be blood relatives. Parental relatedness was not known for a further 25 deaths (19.4% of deaths reviewed). Deaths of children whose parents were related involved children who died at ages ranging from 0 days to 17 years and 10 months old. The most common categories of

25

⁴ Thornton et al (2023) Non-linear associations of maternal pre-pregnancy body mass index with risk of stillbirth, infant, and neonatal mortality in over 28 million births in the USA: a retrospective cohort study; Johannsen et al (2014) Maternal overweight and obesity in early pregnancy and risk of infant mortality: a population based cohort study in Sweden.

⁵ Olubunmi et al (2019) A review of the reproductive consequences of consanguinity.

death identified for these deaths were 'chromosomal, genetic, and congenital anomalies' and 'perinatal or neonatal events'.

Table 19: Deaths reviewed where parents were known to be blood relatives

Bury, Rochdale, and Oldham, 2021/22 - 2023/24

Are parents blood relatives	n	%
No	86	66.7
Not known	25	19.4
Yes	17	13.2

Specific modifiable factors: smoking, alcohol, and substance misuse

Smoking, alcohol misuse, and substance misuse are risk factors for poor child and adult health. All three continue to be identified in reviews of child deaths across Bury, Rochdale, and Oldham. Table 19 provides numbers of deaths where parental smoking, alcohol misuse, or substance misuse were identified. Data on these factors is not always recorded, so the numbers below should be taken as a minimum and are probably an underestimate. Smoking by the children who died is not reliably recorded but data are available on children who had known drug or alcohol misuse issues.

Smoking during pregnancy was identified by CDOP in 7 deaths (5% of those reviewed by the panel) between 2021/22 and 2023/24. All these deaths involved children aged under 6 months old. Smoking in the household (not necessarily during pregnancy) was identified in 23 deaths. Maternal smoking was identified in 21 deaths, paternal smoking in 11 deaths, and both parents smoking in 12 deaths. Alcohol and substance misuse in parents were less common and were identified in 8 and 13 deaths.

Table 20: Deaths where smoking, alcohol, or substance misuse issues were identified Bury Oldham and Rochdale, 2021/22 – 2023/24

Modifiable factor	n	%
Mother smoked during pregnancy	7	5.4
Mother smoked	21	10.9
Father smoked	14	9.3
Both parents smoked	12	3.1
Mother had an alcohol misuse issue	4	5.4
Father had an alcohol misuse issue	7	2.3
Both parents had an alcohol misuse issue	3	4.7
Mother had a substance misuse issue	6	7
Father had an alcohol misuse issue	9	1.6
Both parents had a substance misuse issue	2	2.3
Child had drug or alcohol issue	3	16.3

Specific modifiable factors: unsafe sleeping arrangements

There were 5 deaths where unsafe sleeping practices were identified. All these deaths were categorised as 'sudden unexpected, unexplained death' by CDOP, and made up 41.7% of all 12 deaths in this category. Four of these deaths were of children aged between 28 days and 1 year, one was of a child aged between 1 and 4 years old. In three of the five deaths where

unsafe sleeping arrangements were noted, the family were identified to have been living in overcrowded or otherwise unsuitable housing. In two other cases, parents had consumed alcohol around the time of death.

9. Previous recommendations and actions

The last CDOP report for Bury, Rochdale, and Oldham made the following recommendations:

- I. That future reports should analyse data over a three-year rolling period to enable more meaningful analysis.
- II. Work with statutory partners to increase completion of data fields.
- III. Take steps to reduce the backlog of cases.

This report analyses deaths notified and reviewed by CDOP over the three years from 2021/22 to 2023/24. Training has been provided to contributing general practitioners to improve the quality of data received from general practice. Panel meetings have been extended from half days to full days, increasing the number of cases reviewed at each panel.

In addition, discussion at the Rochdale Health and Wellbeing Board led to a recommendation for further analysis into whether the Bury, Rochdale, and Oldham area has a higher than expected number of deaths categorised as 'neonatal or perinatal events'. This analysis has been completed and will be circulated along with this report.

10. Recommendations

Based on the analysis of deaths reported to and reviewed by CDOP, as well as of the publicly available data presented above, this report recommends that:

- **Child poverty:** Health and Wellbeing Boards should note the worsening in measures of child poverty and to work with local partners to ensure that local antipoverty plans address increases in childhood poverty.
- Smoking, alcohol, and substance misuse: Health and Wellbeing Boards, with partners, should continue to work to reduce smoking, alcohol, and drug misuse in pregnancy by:
 - Ensuring smoking status and alcohol or substance misuse problems are identified early by ensuring that pregnant people are asked about smoking status, alcohol use, and substance use, that this information is recorded, and referrals to appropriate services are made;
 - Continuing wider work to reduce the prevalence of smoking, alcohol misuse, and substance misuse across the population and ensuring provision of smoking cessation and drug and alcohol treatment services.
- Safe sleeping arrangements: Health and Wellbeing Boards, with partners, should continue to promote safe sleeping practices, noting the possible relationship between unsafe sleeping arrangements and overcrowded or otherwise inappropriate housing and with alcohol use by parents. Safeguarding partnerships should ensure for children who have additional vulnerabilities that are captured in child protection or child in need plan.
- Consanguinity: Health and Wellbeing Boards should work with partners and community organisations to raise awareness of the increased risk of death and

illness faced by children born to parents who are close blood relatives and assure themselves that genetic counselling and testing services are being offered appropriately.

Appendix A: Child Death Overview Panel Responsibilities

CDOP responsibilities are:

- to collect and collate information about a child's death, seeking relevant information from professionals and where appropriate family members.
- to analyse the information obtained, to confirm or clarify the cause of death, to determine any contributing factors, and to identify any learning arising from the child death review process.
- that may prevent future death.to make recommendations to all relevant organisations where actions have been identified which may prevent future child deaths and will promote the health safety and well-being of children.
- to notify the relevant locality's Child Safeguarding Practice Review Panel and local Safeguarding Partners when it suspects that a child may have been abused or neglected.to notify the Medical Examiner (once introduced) and the doctor who certified the cause of death, if it is identified there are any errors or deficiencies in an individual child's registered cause of death.
- to provide specific data to NHS digital through the National Child Mortality Database.
- to produce an annual report for Child Death Review Partners on local patterns and trends in child deaths, and any lessons learnt, and actions taken and the effectiveness of the wider child death review process.
- to contribute to local, regional, and national initiatives to improve learning from child death reviews including where appropriate approved research carried out within the requirements of data protection.

Appendix B: CDOP categories of death

Category	Name & description of category
1	Deliberately inflicted injury, abuse, or neglect
	This includes suffocation, shaking injury, knifing, shooting, poisoning & other means of probable or
	definite homicide; also deaths from war, terrorism or other mass violence; includes severe neglect
	leading to death.
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
	adoles cents rather than younger children.
2 (i)	Suicide (where the panel feels the intention of the child was to take their own life)
2 (ii)	Self-inflicted harm leading to death (where it is unclear if the child's intention was to
()	take their own life)
2 (iii)	Death as the result of substance misuse (excluding deaths as a result of a deliberat
- ()	overdose)
3	Trauma and other external factors, including medical/surgical complications/error
J	This includes isolated head injury, other or multiple trauma, burn injury, drowning, unintentional sel
	poisoning in pre-school children, anaphylaxis & other extrinsic factors. Also includes proven medic
	and surgical complications or errors as the primary cause of death. Excludes Deliberately inflicted
4	injury, abuse, or neglect (category 1).
4	Malignancy
	Solid tumours, leukaemias & lymphomas, and malignant proliferative conditions such as
	histiocytosis, even if the final event leading to death was infection, haemorrhage etc.
5	Acute medical or surgical condition
	For example, Kawasaki disease, acute nephritis, intestinal volvulus, diabetic ketoacidosis, acute
	asthma, intus susception, appendicitis; sudden unexpected deaths with epilepsy.
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 palsywith clear post-perinatal cause.
7	Chromosomal, genetic and congenital anomalies
	Trisomies, other chromosomal disorders, single gene defects, neurodegenerative disease, cystic
	fibrosis, and other congenital anomalies including cardiac.
8	Perinatal/neonatal event
	Death ultimately related to perinatal events, e.g. sequelae of prematurity, antepartum and
	intrapartum anoxia, bronchopulmonary dysplasia, necrotising enterocolitis, 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).
8 (i)	Immaturity/Prematurity related
8 (ii)	Perinatal Asphyxia (HIE and/or multi-organ failure)
8 (iii)	Perinatally acquired infection
8 (iv)	Other (please specify)
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.
10	Sudden unexpected, unexplained death
10	Where the pathological diagnosis is either 'SIDS' or 'unascertained', at any age. Excludes Sudde
	Unexpected Death in Epilepsy(category 5).
	One-specied Death in Ephiepsy (category 3).