

## **Report to Health Scrutiny Committee**

# **Infant Mortality – Update**

#### Portfolio Holder:

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## **Purpose of the Report**

The Health Scrutiny Committee has requested a report on infant mortality in Oldham and our actions to reduce these deaths.

#### Summary of the issue:

This report provides an overview of infant mortality in Oldham, and the work currently being undertaken to reduce the rates.

#### 1. Background to Infant Mortality in Oldham

- 1.1 Infant mortality has a devastating impact on the lives of the families of Oldham. The highest priority for the long-term health of the population is to ensure that children are given the best start in life. Infant mortality is defined as the death of a child aged under 1 year.
- 1.2 Oldham's infant mortality rate has been higher than the North West and England rates consistently for over a decade. Oldham's most recent rate for 2016 2018 was 5.95 per 1,000, making it significantly higher than the national figure of 3.9 per 1,000.

Area ▲ ▼	Recent Trend	Count ▲▼	Value ▲▼	
England	_	7,434	3.9	Н
CA-Greater Manchester	_	522	5.0	-
Manchester	_	134	6.1	<del>                                     </del>
Bolton	_	64	5.8	<del>                                     </del>
Oldham	_	55	5.7	<u> </u>
Rochdale	_	48	5.5	<u> </u>
Stockport	_	45	4.7	<del></del>
Salford	_	49	4.6	-
Bury	_	28	4.2	-
Wigan	_	40	3.8	
Tameside	_	31	3.7	<del></del>
Trafford	-	28	3.6	<del></del>

Figure 1: Greater Manchester Infant Mortality Rates 2017-2019, crude rate per 1,000

- 1.3 Infant Mortality is indicative of the health of the whole population. It reflects the state of the wider determinants of health including socio-economic and environmental conditions within a community. Infant mortality rates are significantly higher in the 10% most deprived areas compared with the 10% least deprived in England, and this difference has remained relatively constant since 2010¹.
- 1.4 Oldham ranks 19th most deprived out of 317 local authorities in 2019 Indices of Deprivation (IMD) data. Seven of Oldham's wards (out of 20) appear in the bottom 10% nationally for overall IMD ranking. Ten wards appear in the bottom 20%. In terms of specific domains within the index, 4 wards fall within the bottom 10% and 9 wards within the bottom 20% for Income Deprivation Affecting children
- 1.5 National research has demonstrated that there is a correlation between child poverty and the rates of deaths in children, including infants. The recent report on this issue from the National Child Mortality Database<sup>2</sup>, which is based on data for children who died between April 2019 and March 2020 in England, finds a clear association between the risk of child death and the level of deprivation (for all categories of death except cancer).
- 1.6 More specifically, the research found that over a fifth of all child deaths might be avoided if children living in the most deprived areas had the same mortality risk as

 $<sup>^{1}</sup>https://www.ons.gov.uk/people population and community/births deaths and marriages/deaths/bulletins/childhood in fant and perinatal mortality in england and wales/2019$ 

<sup>&</sup>lt;sup>2</sup> https://www.ncmd.info/wp-content/uploads/2021/05/NCMD-Child-Mortality-and-Social-Deprivation-report\_20210513.pdf

- those living in the least deprived which translates to over 700 fewer children dying per year in England.
- 1.7 Key contributing causes of death include congenital abnormalities, babies that are small for gestational age, and extreme preterm births. To reduce the prevalence of these, public health approaches should focus on those women living in the poorest areas, and work to reduce smoking, unplanned pregnancies, maternal obesity and better engagement with those with maternal disorders such as diabetes. In addition, wider determinants of health were found to be factors identified in deaths of children who live in poverty including overcrowded housing, lack of access to interpreting services, and poor maternal health in pregnancy.

#### 2. Current Data in Oldham

- 2.1 Infant mortality is an important health inequalities issue in Oldham. Deaths under 28 days account for 5% of the life expectancy gap within Oldham and between Oldham and England.
- 2.2 The Child Death Overview Panel (CDOP) for Oldham, Bury and Rochdale (ORB), is one of the four CDOPs in Greater Manchester (GM). The CDOP reviews all child deaths under 18 years, but not including still births, late foetal loss or termination of pregnancy. The panel do not determine the cause of death but instead explores all the factors surrounding the death of the child. This learning enables required actions to be taken to protect the welfare of children and prevent future deaths.
- 2.3 Every year, each CDOP collates information on the cases that have been closed in the last 12 months in order to review for themes. This enables each area to identify any lessons learnt and recognise where population level interventions are required to reduce future child deaths.
- 2.4 In 2019/2020 there were 79 notified cases for Oldham, Bury and Rochdale. In that year 29 cases were reviewed to determine any factors or learning; however, these deaths did not necessarily occur in the last 12 months.
- 2.5 Children are at the highest risk of death in the first year of life, and this is identified within the ORB data, 34% of cases were in the neonatal period and 58% in the first year of life. In relation to this, perinatal and neonatal events continue to be the most common cause of death, this is consistent with GM and national findings. Across ORB 35% deaths were caused by a perinatal/neonatal event, the leading cause of child death locally and nationally. The second most common cause of death was chromosomal/genetic/congenital abnormalities equating to 18% of the closed cases.

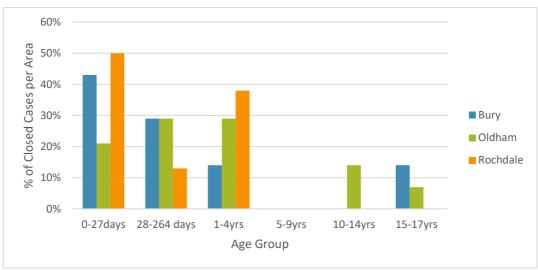


Figure 2: Oldham, Bury and Rochdale Child Death Overview Panel - Proportion of closed cases by Age Band 2019-2020

- 2.6 Modifiable factors recognised by GM, that were identified in ORB cases included: Maternal obesity, maternal smoking in pregnancy, parental smoking and unsafe sleeping. Other factors identified included drug and alcohol use, hospital and clinical factors and housing issues.
- 2.7 Preterm delivery and the associated complications are the leading cause of infant mortality. Preterm delivery is defined as any birth before 37 weeks of pregnancy and can be subdivided depending upon gestational age. The earlier the gestation at which a baby is born, the higher the risk of infant death<sup>3</sup>. Preterm delivery is associated with risk factors such as poverty and maternal smoking <sup>4</sup>. 76% of all deaths in children under 1 year were born prematurely across ORB. This was consistent across all three localities ranging from 71% -80%.
- 2.8 Low birth weight, defined as under 2500 grams, is often caused by a premature birth, and whilst some risk factors are unavoidable others include maternal smoking, drug and alcohol use, poor pregnancy health and nutrition, pregnancy related complications and mothers young age<sup>5</sup>. Across ORB 59% of closed cases under 1 year were associated with a low birth weight.

#### 3. Current activities in Oldham to reduce Infant Mortality

- 3.1 A key element of the Oldham approach is taking a strengths-based and person-centred approach to understand what matters to people rather than being led by service priorities to build a system which works for residents.
- 3.2 Taking this approach has enabled us to implement approaches such as Family Nurse Partnership, Right Start Services (0-5s), and Social Prescribing which are able to work whole system and whole person to really understand the wider determinants of presenting needs and respond accordingly drawing on assets both within public services and the wider community.

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<sup>&</sup>lt;sup>4</sup> https://www.rcpch.ac.uk/sites/default/files/2018-10/child health in 2030 in england -report 2018-10.pdf

<sup>&</sup>lt;sup>5</sup> https://www.nuffieldtrust.org.uk/resource/low-birth-weight

3.3 There are key programmes of work that aim to reduce the risk of infant deaths across Oldham. Below are the details on 1) smoking cessation in pregnancy, 2) genetic outreach 3) safer sleeping 4) support for new families

## 4. Smoking in Pregnancy

- 4.1 Smoking and exposure to secondhand smoke during pregnancy is responsible for an increased rate of stillbirths, miscarriages and birth defects.
- 4.2 The primary aims of the GM Supporting a Smokefree Pregnancy Scheme (SaSFPS) are to improve the health of pregnant women, to reduce health risks to their unborn children and address the GM Infant Mortality Review sitting alongside the Saving Babies Lives care bundle element 1: Reducing Smoking in Pregnancy and the NHS Long Term Plan. In this context the key objective of the programme is to encourage pregnant smokers to stop smoking. Stopping smoking will not only benefit women who smoke and are planning a pregnancy, are already pregnant or have an infant aged under 12 months but will also benefit the unborn child of a woman who smokes, any infants and children she may have, her partner and others in her household who smoke.
- 4.3 The ambition of the Smoking in Pregnancy programme is to reduce smoking in pregnancy across GM through a standardised smokefree pregnancy pathway with investment in workforce development, equipment, and a targeted intervention aimed at our highest risk population. Initially, the programme aimed for a reduction in smoking status at time of delivery (SATOD) to the England average (10.5%) with an ambition to be better than the England average by the end of 2021 and ultimately for no woman to smoke during her pregnancy.
- 4.4 Oldham was part of the original roll-out of the SaSFPS and moved to a Maternity-led Smokefree Pregnancy model in Summer 2020, and now has a Specialist Midwife and two dedicated Maternity Support Workers based at The Royal Oldham Hospital
- 4.5 Over recent years Oldham has seen reductions in the rates of women smoking when they are pregnant, from 16.1% in 2013/14 to 13.6% in 2019/29, however, we know there is significant variation in rates within the borough. Initial data from NHS Digital shows that SATOD rates in Oldham for December 2020 had dropped to 10.5%, despite the impact of local COVID restrictions. However, whilst we are seeing reasonable levels of women who achieved a 4 week quit (4WQ) remaining quit at 12 weeks post-partum (50%), we are not currently meeting the GM target of 60% for the percentage of women recruited on to the scheme who achieve a 4WQ (currently at 46%).
- 4.6 The Maternity Smoking in Pregnancy (SIP) Team have made considerable progress and are continuing to adapt the service offer during the ongoing COVID-19 pandemic. They have implemented Nicotine Replacement Therapy (NRT) direct supply on both antenatal and postnatal wards and NRT is also now available to be given in clinics which creates a 'one stop smoking shop'.
- 4.7 There has also been a robust workforce development programme undertaken by the SIP Team with the wider Maternity Team, including, Smoking Cessation (Baby Be Smoke Free) training, NRT training and Public Health training, which has been incorporated as part of the induction programme for all Midwives.
- 4.8 The SIP Team continue to deliver the Smokefree Pregnancy Incentive Scheme which targets a defined group of vulnerable women (teenage pregnancy, living in areas of high deprivation, living in areas of high smoking rates, smoked at point of delivery in last pregnancy) living in communities where smoking rates are highest, and who would find it hardest to maintain a quit without additional support.

4.9 And finally, the SIP Team work with the Community Stop Smoking Service (as part of the Health Improvement and Weight Management Service – Your Health Oldham) to strengthen pathways to support partners and others in the household who smoke by providing clear advice about the danger that other people's tobacco smoke poses to the pregnant woman and to the baby – before and after birth – and offers help to stop smoking by using evidence-based multi-component interventions and pharmacotherapy.

#### 5. Genetic Outreach

- 5.1 All the cases reviewed by the Oldham Bury and Rochdale CDOP last year that related to chromosomal, genetic and congenital abnormalities were children of Black, Asian or minority ethnicity. In addition, overall, there were higher rates of child deaths in Black, Asian or minority ethnicity groups across Oldham. This was consistent across GM and it is important that this inequality is addressed. Consanguinity is a known risk factor for congenital abnormalities and therefore an important risk factor when addressing child deaths.
- 5.2 As a response to this, Oldham Council has commissioned a genetic outreach service since 2015. The service aims to raise genetic literacy and awareness in affected communities in Oldham in order to support informed marriage and reproductive choices. The service was recommissioned this year and is provided by HomeStart. The service also aims to raise awareness of:
  - The impact of genetic disorders on infant and childhood mortality locally
  - Knowledge of genetic and cultural issues related to consanguineous marriage
  - The health services that people can be referred to for further help/information
  - How to initiate conversations appropriately in the community

#### 6. Safer Sleeping Programme

- 6.1 Following the completion of a local case review on the sudden and unexpected death of a baby in Oldham the Children's Safeguarding Partnership agreed to undertake a piece of work relating to safer sleep. This work was later reinforced following the publication of the National Child Safeguarding Practice Review of Sudden and Unexpected Deaths in Infancy (SUDI). Both local and national reviews identified challenges relating to the application of safe sleep guidance in the home.
- 6.2 A multi-agency task and finish group is leading this work in Oldham and have identified that whilst safe sleep messages are provided regularly and consistently by midwifery and health visiting services, they are not always being followed by family members.
- 6.3 The group have begun an engagement exercise with the aim of speaking with new parents and family members about safe sleep, the advice given and any potential barriers to the advice being followed. Once complete the engagement exercise will inform the development of new policies, guidance and resources locally to support parents and reduce the risks of sudden and unexpected deaths relating to unsafe sleeping arrangements.

#### 7. Under 2 year old programme

7.1 In April 2020 it was acknowledged across partners the concern about Covid -19 and the impact of "lock down" on families with young children and babies. With the limitations in

- support available to new families, early identification of support needs might be missed, and when an increase in presentation of 0-2's with fractures was identified, a multiagency review group was established to understand the individual circumstances, understand themes and plan a joint response.
- 7.2 On review it was identified that the majority of these cases were accidental injuries where the wider impact of Covid-19 was a potential contributing factor, primarily linked to increased family pressure due to lockdown which lead to reduced supervision of young children. It was recognised that in many of these cases accident prevention and parenting supervision messaging might have prevented the injuries.
- 7.3 The review group developed an action plan which focused on the identification of vulnerable babies across agencies, awareness raising messages for parents and professionals, re-introduction of face to face contact by health visitors to offer additional support and assessment to new parents (which was outside of national directives), the accelerated implementation of ICON project locally and the provision of funded places for vulnerable 1-2 year olds in an education setting.
- 7.4 The group agreed further focus on parenting support was necessary. Based on "every contact counts" the group developed a professionals' pack containing key advice and guidance for parents of new babies and information on support services available. The idea behind the pack was encourage all professionals having contact with new parents to provide advice and signposting to support services. Again the offer of free nursery places to under 2 year olds was extended and multi-agency communications were cascaded with key messages about support for parents. The group recognised that consideration of a whole system approach for parents of young children needed to be understood both during and post Covid 19. This work has now been embedded into the Early Years Partnership plan.

### 8. Family Nurse Partnership

- 8.1 Maternal age is another known risk factor for infant mortality. In 2019, the national infant mortality rate was highest for mothers aged under 20 years. In Oldham we have had the Family Nurse Partnership for six year. This service provides intensive support for new mothers, focused on those aged under 20 years. This service supports some of our most vulnerable families.
- 8.2 Family Nurses work with clients from early in pregnancy (prior to 16 weeks gestation) and aim to improve and help clients maintain their antenatal health during their pregnancy. This can include providing information on smoking cessation, promoting staying well (including immunisation during pregnancy to protect mum and baby) and help clients to gain an understanding of changes which occur to their bodies during pregnancy.
- 8.3 Promoting good physical health ultimately supports the development of positive emotional wellbeing. Furthermore, where a client is experiencing difficulties with emotional wellbeing family nurses are able to identify and provide interventions and signpost/make referrals to other services earlier due to the frequency of visits offered.

#### 9. Recommendations

9.1 The Health Scrutiny committee are asked to note the data on infant mortality and support the ongoing actions to reduce infant mortality across the borough.