

**Manchester City Council
Report for Information**

Report to: Children and Young People Scrutiny Committee – 6 November 2019

Subject: Update on the Planned Manchester Healthy Weight Strategy to Tackle Obesity and Update on Progress in Delivering the Manchester Reducing Infant Mortality Strategy

Report of: Director of Public Health/Population Health Consultant in Public Health

Summary

This report provides an overview of the health data for Manchester children in relation to childhood obesity and infant mortality.

Information is provided on the causes and impacts of obesity and the work taking place to develop a Manchester Healthy Weight Strategy 2020-2025, which will take a whole system, partnership approach to tackling obesity in the city. The report includes an update on new service models being commissioned to reduce obesity in children and their families.

The report also summarises the progress that has been made in delivering the Manchester Reducing Infant Mortality Strategy following its publication in March 2019.

Recommendations

Members of the Committee are asked to:

1. Note the report; and
 2. Give support to the proposed Manchester Healthy Weight Strategy to reduce obesity.
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Wards Affected: All

Manchester Strategy outcomes	Summary of how this report aligns to the OMS
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	Being in good health and developing good habits in personal health care is essential for our children and young people in enabling them to achieve their full potential in transition to adulthood. A healthy start in life is fundamental to our young people being able to

	contribute to the city and take employment opportunities.
A highly skilled city: world class and home grown talent sustaining the city's economic success	Improving educational outcomes is essential for young people to gain qualifications and contribute to Manchester's economic success. Ensuring our children are healthy contributes to school readiness and reduced school absence through poor health conditions.
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	Ensuring the best health of our children is critical in addressing inequalities and the wider determinants that cause poor health. It is essential that children and their families have access to good health care and that referral is in place for early and additional help.
A liveable and low carbon city: a destination of choice to live, visit, work	Demonstrating good health outcomes for our children is attractive to parents who choose to live and work in our city.

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1.0 Introduction

1.1 The Manchester Population Health Plan sets out our vision that, by 2027, we will all be living longer, healthier lives. The plan has five key priorities:

1. Improving outcomes in the first 1,000 days of a child's life.
2. Strengthening the positive impact of work on health.
3. Supporting people, households, and communities to be socially connected and make changes that matter to them.
4. Creating an age-friendly city that promotes good health and wellbeing for people in mid and later life.
5. Taking action on preventable early deaths.

The Manchester Population Health Plan can be found by following this link:

https://secure.manchester.gov.uk/info/200048/health_and_wellbeing/5962/public_health/2

1.2 The first priority in the Manchester Population Health Plan is improving outcomes in the first 1,000 days of a child's life. This is the time during pregnancy and up to when the child is aged 2 years, a critical stage in a child's development and a key focus for developing responses to infant mortality and child obesity.

1.3 The latest data from ONS shows that, as at mid-2018, there are estimated to be around 37,800 children aged 0-4 resident in Manchester. This is equivalent to just under 7% of the total resident population.

1.4 Data from Manchester City Council's in-house forecasting model shows that the number of children aged 0-4 years grew rapidly over the 10 year period between 2001 and 2010, driven by increases in international immigration and the number of births to mothers born outside of UK. Manchester is forecast to see a small increase in the population aged 0-4 years in the period up to 2021.

1.5 Health and care needs of children aged 0-4 years remain high relative to other parts of England and comparable cities. Figures for August 2018 suggest that over half (52%) of children aged under 5 years in Manchester live in Lower Super Output Areas (LSOAs) which fall within the most deprived 10% of LSOAs in England. This compares with just 13% of children aged under 5 years living in England as a whole.

1.6 Data from the End Child Poverty Coalition (published in January 2018) shows that, in 2017, Manchester was estimated to have the second highest proportion of children living in poverty in the UK (topped only by Tower Hamlets). Between 2016 and 2017, there were estimated to be an additional 5,890 children living in poverty across Manchester. In 5 out of the 32 wards in the city (Moss Side, Rusholme, Longsight, Cheetham and Ardwick) more than 50% of children were estimated to be living in poverty.

1.7 The high levels of child poverty and deprivation in Manchester are persistent and ingrained and are reflected in the poor health outcomes for young children in Manchester. Our local data relating to infant mortality and obesity shows poorer health outcomes for families living in our most deprived areas. Tackling family poverty is essential to enable improved health outcomes to be realised.

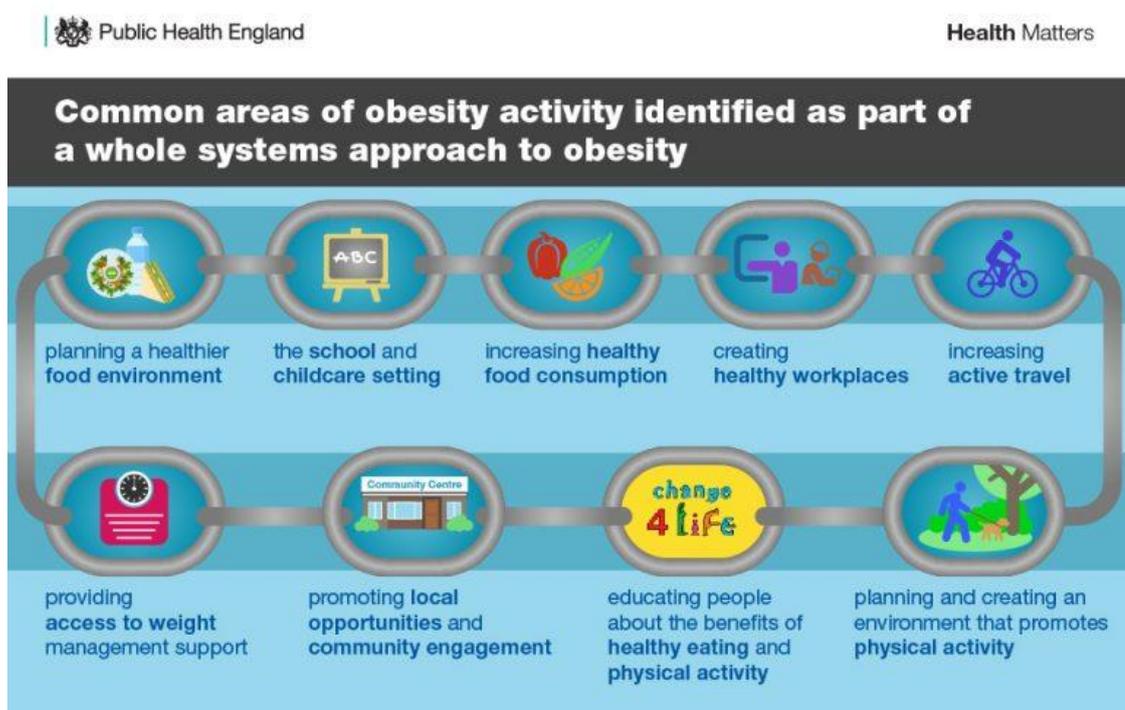
2.0 Childhood Obesity

2.1 Obesity is one of the biggest health problems this country faces. Nearly a quarter of children in England are obese or overweight by the time they start primary school at age five and this rises to one third of children at age eleven. The North West region has the second highest childhood obesity rate in the country.

2.2 Tackling childhood obesity has been a key priority for local government. The Local Government Association (LGA) plan 'Childhood obesity: a plan for action' (2016) set out the ambition to halve childhood obesity and significantly reduce the gap in obesity between children from the most and least deprived areas by 2030.

2.3 This was followed up by the 2018 LGA report; 'Making childhood obesity everybody's business' which advocated for whole system approaches to reducing obesity, acknowledging the impact of obesogenic environments and the responsibilities of a wider range of departments and agencies. Examples of activity included in a whole system approach to obesity can be seen in Figure 1.

Figure 1 - A whole systems approach to obesity - Public Health England



- 2.4 Manchester is committed to fully engaging with this whole system approach. The Population Health Team is leading the development of a city-wide Healthy Weight Strategy, which is being informed by learning from the LGA's national Childhood Obesity Trailblazer Programme. Manchester's five year Healthy Weight Strategy will be published early next year for the period 2020-2025.
- 2.5 The Healthy Weight Strategy will coincide with a revised commissioned offer of services for children and families to reduce obesity and maintain a healthy weight. This is described in section 6.0.

3.0 Measuring Obesity in Children

- 3.1 The National Child Measurement Programme (NCMP) measures child obesity prevalence across England. The NCMP is carried out annually by the School Nursing Service in Manchester, weighing and measuring pupils in Reception Year (aged 4-5) and Year 6 (aged 10-11).
- 3.2 Participation is optional and parents must consent to their child being weighed and measured. In 2018/19, Manchester NCMP had a take up of 92% Reception children (6,122) and 90% Year 6 pupils (6,188).
- 3.3 Body mass index (BMI) is the most common method of measuring obesity. It is calculated by dividing body weight (kilograms) by height (metres) squared. However, as children are still in a period of growth and change, a centile scale (which uses a variety of measures in conjunction with BMI) is seen as a more appropriate measure.
- 3.4 Using this centile scale, the NCMP is able to identify and record children as being underweight, a healthy weight or being overweight or obese.
- Underweight = BMI below the 2nd centile
 - Healthy weight = Between 2nd and 90th centile
 - Overweight = BMI equal to or greater than the 91st centile
 - Obese = BMI greater than or equal to the 98th centile.

It is important to note the distinction between being overweight and becoming obese. The term excess weight includes both overweight and obese.

- 3.5 Data is published annually by Public Health England with the most recent results from the 2018/19 NCMP survey being released on 10th October 2019.
- 3.6 The 2018/19 NCMP data shows the prevalence of overweight and obese children in Reception and Year 6 in Manchester is above the national average (see Table 1 below):

Table 1 – NCMP Data 2018/19

	Manchester Reception	England Reception	Manchester Year 6	England Year 6
Excess weight	25.1%	22.6%	41.0%	34.3%
Overweight	13.2%	12.9%	14.7%	14.1%
Obese	11.9%	9.7%	26.2%	20.2%

Excess weight

Excess weight includes both overweight and obese.

The data shows that:

25.1% of children in Reception are at an excess weight (22.6% in England)

13.2% of children in Reception are overweight (12.9% in England)

11.9% of children in Reception are obese (9.7% in England)

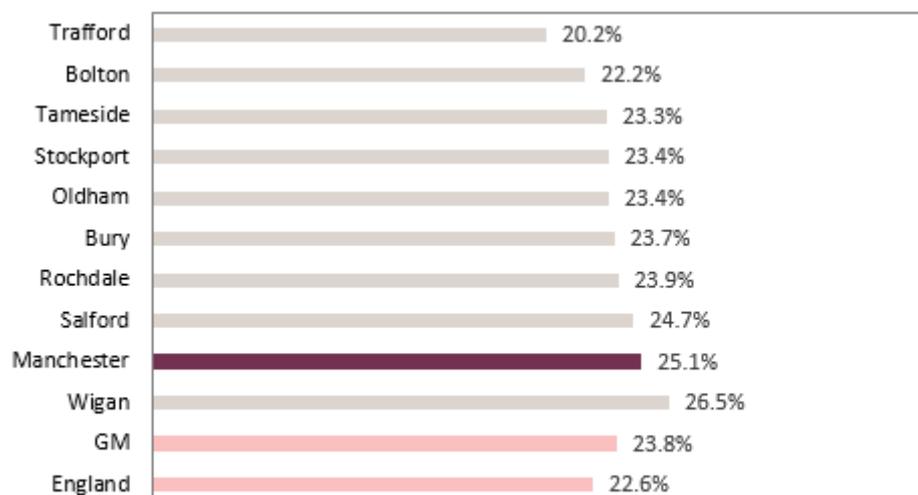
41.0% of children in Year 6 are at an excess weight (34.3% in England)

14.7% of children in Year 6 are overweight (14.1% in England)

26.2% of children in Year 6 are obese (20.2% in England)

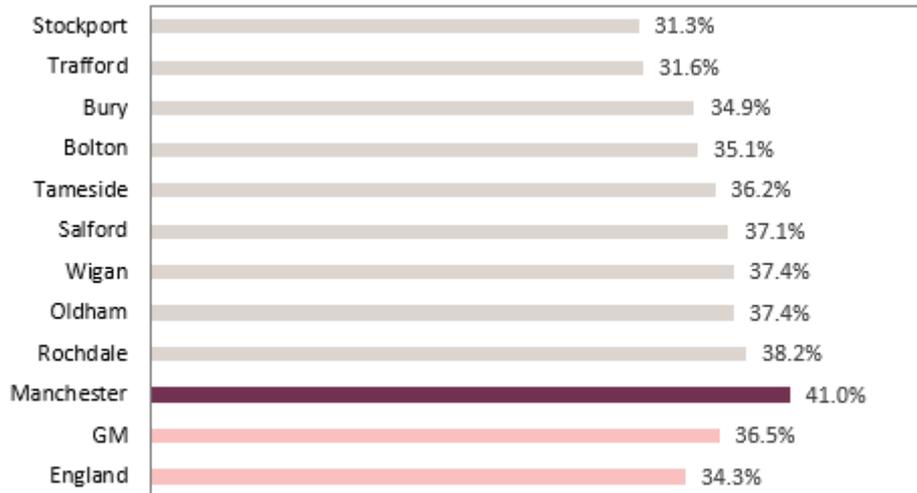
- 3.7 The 2018/19 NCMP data shows Manchester having the second highest levels (25.1%) of excess weight (including overweight and obese) amongst Reception children in Greater Manchester (see Graph 1) and the highest levels of excess weight (including overweight and obese) children in Year 6 (41.0%) (see Graph 2).

Graph 1 - Prevalence of Reception children with excess weight (overweight and obese) 2018/19



Source: NHS Digital, National Child Measurement Programme (NCMP) 2018/19

Graph 2 - Prevalence of Year 6 children with excess weight (overweight and obese) 2018/19

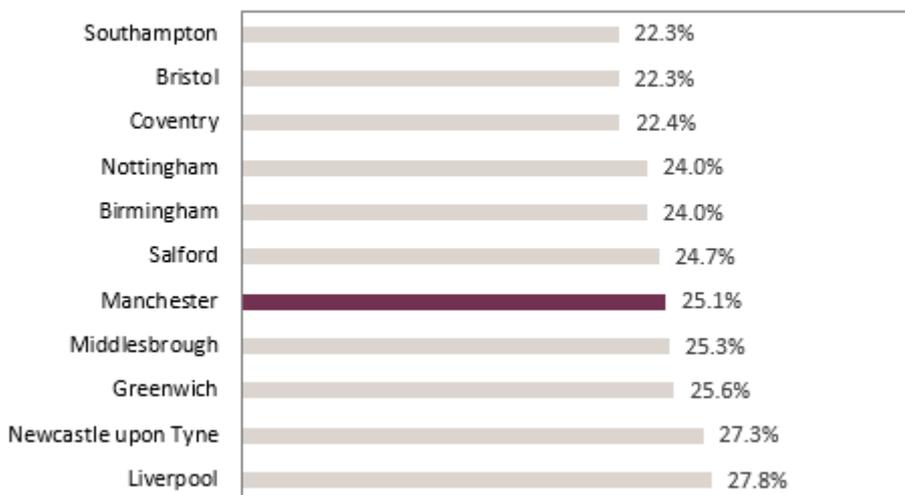


Source: NHS Digital, National Child Measurement Programme (NCMP) 2018/19

- 3.8 When ranked according to position against ten similar local authorities deemed to be Manchester’s ‘Statistical Neighbours’ by the Department of Education, Manchester has the fifth highest prevalence of excess weight at Reception (see Graph 3) and second highest prevalence at Year 6 (see Graph 4). Manchester’s closest ‘statistical neighbour’ (local authorities with similar characteristics) is Nottingham, with a further nine authorities having some similarities to Manchester.

Graph 3 - Comparison of children overweight including obesity 2018/19

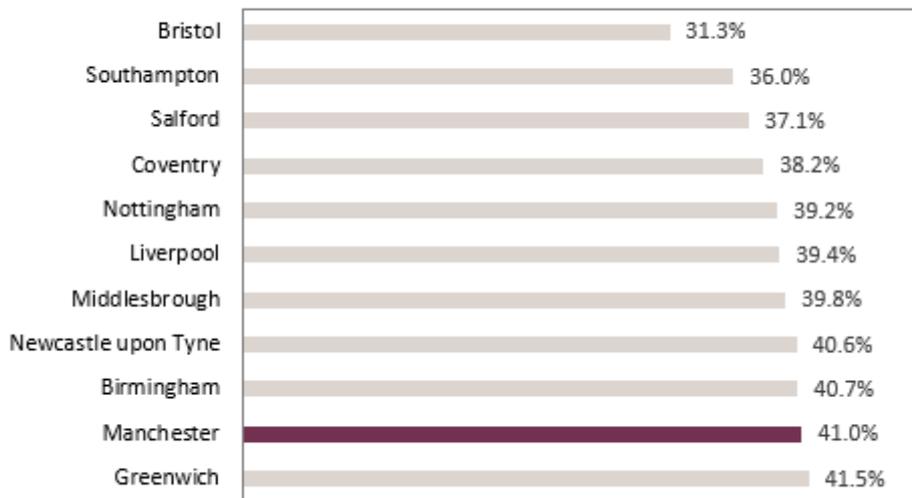
Reception - compared to DfE Stat Neighbours



Source: NHS Digital, National Child Measurement Programme (NCMP) 2018/19

Graph 4 - Comparison of children overweight including obesity 2018/19

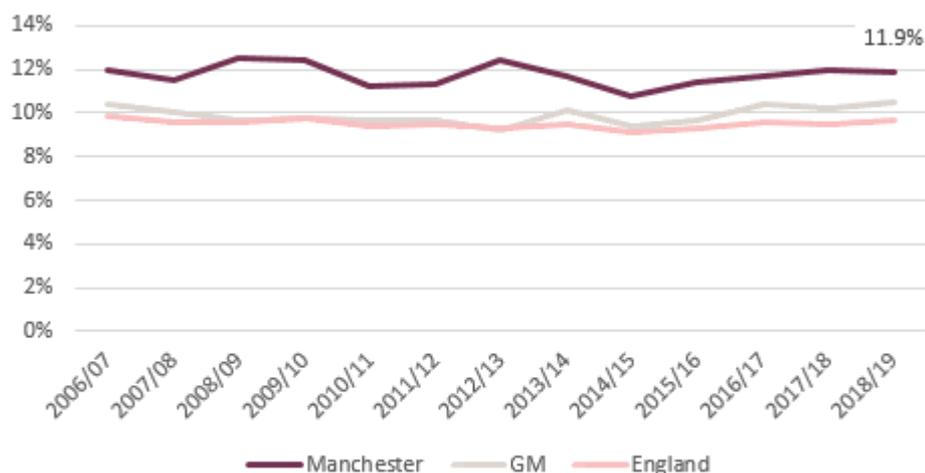
Year 6 - compared to DfE Stat Neighbours



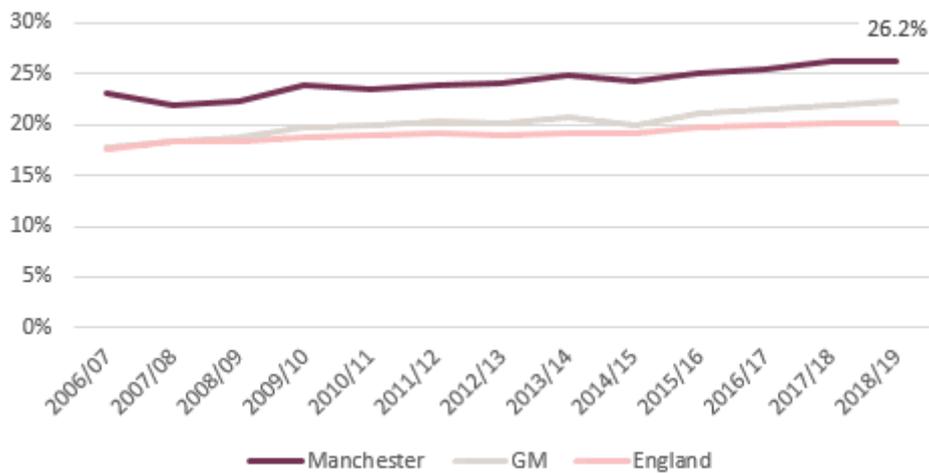
Source: NHS Digital, National Child Measurement Programme (NCMP) 2018/19

- 3.9 In Manchester, the prevalence of obesity in both Reception and Year 6 are significantly above the regional and national average. This figure had been increasing since 2014/15 but saw small reductions in 2018/19 compared to the previous year.
- 3.10 The graphs below show NCMP data going back to 2006/07, with Manchester (top line) compared to England and Greater Manchester. While childhood obesity in Reception had shown evidence of reducing, there was a four year rise to 2017/18 followed by a small reduction in 2018/19 (see Graph 5). Childhood obesity in year 6 had been steadily increasing until 2018/19 which saw a small reduction compared to the previous year (see Graph 6).

Graph 5 - Prevalence of Obesity - Reception Year NCMP 2006/07 - 2018/19



Graph 6 - Prevalence of Obesity - Year 6 NCMP 2006/07 - 2018/19



- 3.11 Our recently published 2018/19 data demonstrates that Manchester is not improving, but it is not getting worse. The data shows only minor change from the previous year:

Reception data 2018/19 compared to 2017/18

- Underweight unchanged at 1.2%
- Healthy weight reduced to 73.6% from 74.0%
- Overweight increased to 13.2% from 12.8%
- Obese decreased to 11.9% to 12.0%

Year 6 data 2018/19 compared to 2017/18

- Underweight increased to 1.6% from 1.2%
- Healthy weight decreased to 57.4% from 58.0%
- Overweight increased to 14.7% from 14.5%
- Obese decreased to 26.2% from 26.3%

- 3.12 The stubbornly high levels of overweight and obese children in the city indicate a need to increase the reach and scale of effective interventions and programmes to support families and children. As well as prevention work, we need to ensure sufficient support to address the needs of families where the children are already overweight and obese.

4.0 Cause and impact of obesity

- 4.1 Obesity in children and young people has a number of adverse impacts. Obesity is associated with poor psychological and emotional health which can result from negative self image or victimisation and bullying. This can lead to more physical self harm or abuse.
- 4.2 Obese children are more likely to become obese adults and therefore carry a higher risk of morbidity, disability or premature mortality in adulthood.

- 4.3 Obesity prevalence is strongly correlated with deprivation and is highest in the most deprived areas. Nationally, there is a clear linear relationship between obesity prevalence in children and the Index of Multiple Deprivation (IMD) decile for the area where they live.
- 4.4 In Manchester, the prevalence of obesity (including severe obesity) in Year 6 in the most deprived quintile was 26.5%, more than double than that of the least deprived quintile (9.5%) in the period from 2013/14 to 2017/18.
- 4.5 There is a higher prevalence of overweight or obese boys than girls at both Reception and Year 6 nationally. This can be seen in our Manchester data with the gap between boys and girls widening from 0.8% in Reception to 4% by Year 6.
- 4.6 Nationally, children from Black and Minority Ethnic (BAME) groups have a higher prevalence of overweight and obesity at Year 6. This pattern can also be seen in our Manchester data, with the lowest prevalence in White and Asian, Chinese and White British groups and highest prevalence seen in Black African, Black Caribbean and Bangladeshi groups.
- 4.7 Obesity is a complex problem with many drivers. Human biology, growth and development early in life, eating and physical activity behaviours, people's beliefs and attitudes and broader economic and social drivers all have a role to play in determining obesity.
- 4.8 The multiple determinants of obesity mean that to tackle it requires coordinated action across society.

5.0 Developing a new Healthy Weight Strategy to tackle obesity

- 5.1 The multiple determinants of obesity mean that to tackle it effectively requires a co-ordinated action across the city, with the efforts of partners broader than just health and care services for children and families.
- 5.2 Collaboration and ownership of the Healthy Weight Strategy is essential and the development of this strategy will involve engagement with partners and communities and a strong focus on behaviour change in neighbourhoods.
- 5.3 There is growing recognition that a whole systems approach, involving stakeholders from across the city, will help tackle obesity. Having the sustained, visible and active support of senior leaders from different sectors sends a clear signal that tackling obesity is a priority for the whole community, not just the Population Health Team.
- 5.4 Manchester is adopting this approach in developing a Healthy Weight Strategy for the next five years. This approach is advocated by Public Health England in 'Making Childhood Obesity Everyone's Business (2018)' and stresses the importance of engaging key strategic partners who are able to influence all aspects of our city and its neighbourhoods.

- 5.5 Public Health England highlights the need to work together to improve 'obesogenic environments'. Obesogenic environments are areas where high calorie fast food dominates the local food economy, where the built environment does not support everyday physical activity (for example, children cycling, walking rather than transport) and where there is a limited offer or take up of local facilities (for example, access to gyms, parks and swimming pool). In Manchester we already have some supportive policies in place that we can build upon, such as a fast food licencing policy and free swimming passes.
- 5.6 The Strategy will consider the early positive outcomes reported from the community engagement approach adopted from the 'Winning Hearts and Minds' Programme in areas of North Manchester. This programme has sought to create behaviour change in adults, taking up more physical activity to reduce the risk of heart disease.
- 5.7 Manchester is also fortunate to be able to access learning from cities that have a proven track record of reducing obesity levels including Leeds, Amsterdam, and Chicago. This information will be used to inform the development of the Health Weight Strategy.
- 5.8 Manchester is also one of only two authorities chosen to host a Public Health England Maternal Obesity pilot encouraging professionals to discuss healthy weight before, during and after pregnancy. This pilot will result in a resource being jointly developed between midwifery, health visiting and early years staff. There is more detail on this pilot in section 11.6.
- 5.9 A strong network of organisations and programmes exists in the city focused on supporting healthy lifestyles across the life-course. The approach of the strategy will be to improve communication and coordination and re-align interventions in the provision of quality services. It will also support current and developing work programmes and pilot new approaches to healthy weight.
- 5.10 This whole system approach will be developed further through the Local Integrated Neighbourhood Teams (INTs) within the Manchester Local Care Organisation (MLCO), and in work with colleagues in all Council directorates. There is obviously a key role for Children's Services and Neighbourhood Directorates as we know that green spaces and a good environment are crucial in our approach.
- 5.11 The Healthy Weight Strategy for children and adults will span five years from 2020 to 2025. It will align with a number of other key Manchester strategies and documents including:
- Our Manchester, Our Children (2016-2020)
 - Manchester Population Health Plan (2018–2027)
 - Family Poverty Strategy (2017-2022)
 - Manchester's Sport and Physical Activity Strategy (2019- 2028)

The successful delivery of these strategies will contribute to addressing childhood obesity in Manchester as they all address the social determinants of health.

- 5.12 Finally, a partnership steering group will oversee the delivery of the strategy and provide updates on progress to the Children and Young People Scrutiny Committee, the Children's Board and Health and Wellbeing Board.

6.0 Commissioned Services - Healthy Weight

- 6.1 Given the levels of obesity in the city, it has been necessary to change some of the service models and provision to ensure greater impact.
- 6.2 A new weight management service for children is being piloted by the School Health Service's Healthy Schools Team who are part of the MLCO. The Healthy Weight Project was established in recognition of the number of children being identified through NCMP as obese and requiring intensive intervention.
- 6.3 The Healthy Weight Project is achieving good levels of engagement with 89.6% of children identified taking part and 82.6% of this group have decreased their BMI. This project will receive additional funds to support identified three year olds with obesity at the 99th centile coming into Reception. The project will also benefit from an additional post in the Health Visitor Service to identify severely overweight young children.
- 6.4 The School Health Service has identified a high number of families that require intensive support and currently there is a gap in this type of service for children in Manchester and Greater Manchester. The intensive offer from the Healthy Weight Project, described above, for children in Reception Year is an initial step in reversing the trend and reducing obesity in the early years. If successful, the Healthy Weight Project model will also be looked at to deliver other evidence based interventions between Reception and Year 6.
- 6.5 Manchester Health and Care Commissioning are also piloting a Slimming World on Referral scheme through the Be Well Social Prescribing Services. This is targeted at adults and offers 12 weeks free attendance at Slimming World at any one of seventy groups in the city. Slimming World also provides an offer for 11-15 year olds who require weight management support, where a parent attends the group.
- 6.6 The Population Health Team is working with Mcr Active and Big Manchester (Barnardos), to develop a neighbourhood offer for healthy weight.
- 6.7 While this model is still developing, there are still a number of commissioned services who work to reduce childhood obesity:
- Integrated Infant Feeding Service- commissioned in 2017 to increase the uptake of breastfeeding in North Manchester.

- Health Visiting Service - identifying overweight babies and give advice on weaning, healthy eating and physical activity for young children.
- Healthy Schools Service- implements a number of activities within school settings to keep children and young people active, including the Daily Mile Initiative and national recognition for improving school food.
- School Nursing Service - deliver the NCMP programme, identify overweight and obese children, and ensure interventions are offered to families.

6.8 There has also been Early Help support for families where children are obese, with Early Help practitioners giving continued support to some families over a long period of time. There is evidence of good results through this Early Help work.

6.9 By 2021, plans are for family weight management to be included in a new city wide Wellbeing Service. This is being developed by the Population Health Team to also include PARS (Physical Activity on Referral Service), Tobacco Addiction Treatment Service, mental health and wellbeing provision.

6.10 It is essential that Manchester takes a different approach to reducing childhood obesity, both in the commissioned service offer to children and families and also in the strategic involvement of partners beyond the parameters of health and social care.

7.0 Obesity and Safeguarding

7.1 Childhood obesity is included within Manchester's Neglect Strategy. Partners within Manchester's Safeguarding Partnership are working together to ensure that practitioners are equipped to identify and respond appropriately when neglect is identified as a reason for obesity.

7.2 The Healthy Schools team have developed an Obesity Safeguarding Pathway and Assessment Tools. These were launched in October 2018 in response to actions from a serious case review where obesity through parental neglect was a significant risk to the health of the child.

7.3 Safeguarding training around obesity has taken place, supporting practitioners to identify obesity through neglect and have 'difficult' conversations around weight.

8.0 Reducing Infant Mortality

8.1 Infant mortality is an indicator of the overall health of a population. It reflects the relationship between the causes of infant mortality and upstream determinants of population health, such as economic, social and environmental conditions.

8.2 Infant mortality is defined as deaths that occur in the first year of a child's life.

The infant mortality rate is the number of deaths at ages under one per 1,000 live births. Stillbirths are not normally counted as infant deaths and are not included in the calculation of the infant mortality rate, however some of the factors that contribute to stillbirths may also be contributing factors in infant deaths.

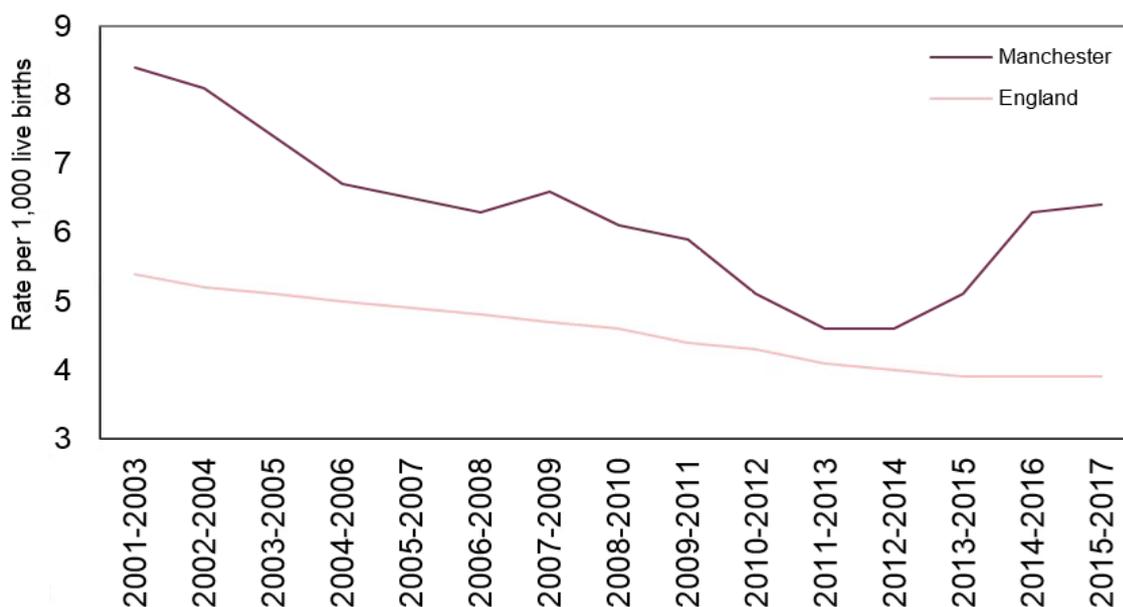
- 8.3 A draft strategy to reduce infant mortality in Manchester was endorsed by Children and Young People Scrutiny Committee and approved by the Health and Wellbeing Board in January 2019. The Manchester Reducing Infant Mortality Strategy can be found by following this link:
https://secure.manchester.gov.uk/downloads/download/7002/reducing_infant_mortality_strategy

The strategy was launched at three events across the city in March 2019.

9.0 Patterns and trends in infant deaths

- 9.1 Following a long period of year-on-year reductions, Manchester saw a concerning increase in three year infant mortality rates since 2011-13 (see Graph 7) Manchester's infant mortality rate for 2015-17 is 6.4 per 1000 live births compared to an England rate of 3.9.

Graph 7 - Infant Mortality Rate per 1,000 live births (2001 - 2017)



Source: Office for National Statistics © Crown Copyright 2018

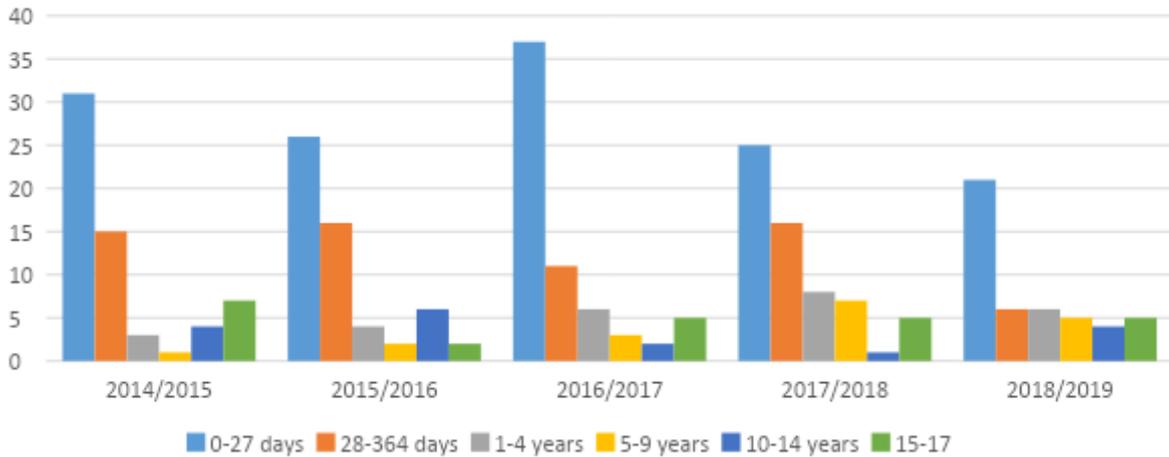
- 9.2 Data from the Office of National Statistics (ONS) shows single year infant mortality data for 2018 for Manchester compared to England (see Table 2).

Table 2 - Infant Mortality Data for 2018 - Manchester and England

Infant age	Manchester				England			
	Total number of deaths	Mortality rate per 1,000 live births	95% Confidence limits		Total number of deaths	Mortality rate per 1,000 live births	95% Confidence limits	
			Lower	Upper			Lower	Upper
Perinatal (under 7 days)	56	7.7	5.9	10.0	3,918	6.2	6.0	6.4
Neonatal (7 - 28 days)	29	4.0	2.8	5.7	1,765	2.8	2.7	3.0
Postneonatal (28 - 365 days)	6	0.8	0.4	1.8	684	1.1	1.0	1.2
Infant (under 365 days)	35	4.8	3.5	6.7	2,449	3.9	3.8	4.1

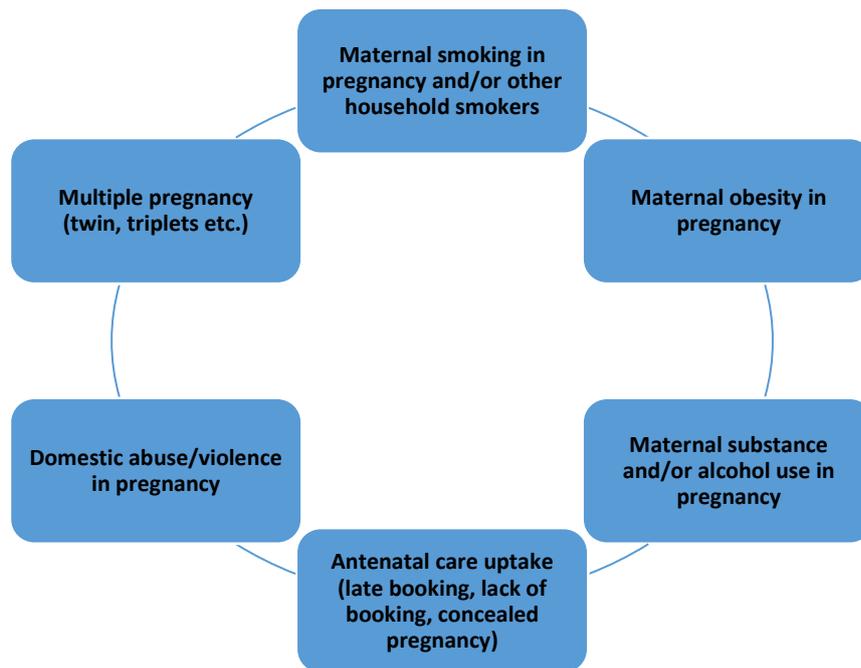
- 9.3 The total number of infant deaths has fallen from 41 in 2017 to 35 in 2018 - equivalent to a reduction in the infant mortality rate from 5.5 per 1,000 in 2017 to 4.8 per 1,000 in 2018. These are figures for a single calendar year so we would naturally expect there to be some random year-on-year variation.
- 9.4 Whilst the most recent unpublished figures have yet to be validated (2016-18), it is hoped that the recent increase has started to tail off.
- 9.5 Child Death Overview Panels (CDOP) collect and review information about each child death in a local area in order to build a rich and detailed picture of themes and patterns and inform local strategic planning to reduce harm and promote better outcomes for children in the future.
- 9.6 Graph 8 below shows the Manchester CDOP cases closed by age at time of death between 2014 and 2019. Of the total 47 cases closed (2018/2019), a large proportion of the deaths occurred in the neonatal period (<28 days of life) accounting for 45% (21) of the total cases closed. A further 6 (13%) infants died before their first birthday (28-364 days of life), highlighting 58% (27) of the deaths occurring in the first year of life. Figures were the same for Greater Manchester, with 42% of all closed cases being neonates with 61% under the age of one. This remains a year on year trend as is the case across Greater Manchester CDOPs, highlighting infants under the age of 1 as the most vulnerable age group.

Graph 8 - Manchester CDOP cases closed by age at time of death (2014/2019)



- 9.7 Of the 26 infant deaths (0-364 days), 12 (46%) had one or more modifiable factors identified in the review. Year on year, infants under the age of one account for the majority of modifiable factors identified, with the most common factors occurring in the antenatal period such as maternal smoking in pregnancy, maternal obesity in pregnancy and access/uptake of antenatal care services.
- 9.8 Of the 27 infant deaths, the majority of cases were categorised as a perinatal/neonatal event (16, 59%) followed by categorisations of chromosomal, genetic and congenital anomalies (7, 26%) and sudden unexpected, unexplained death. Of the 16 deaths categorised as a perinatal/neonatal event, 94% (15) of infants were born prematurely, with prematurity featuring as the registered cause of death.
- 9.9 When reviewing infant deaths, a number of factors during pregnancy increase the risk to both mother and baby which may also contribute to an early onset of labour thus increasing the vulnerability, ill-health or death of the infant (see Figure 2). All of the associated factors act as a multiplier effect increasing the risk of prematurity, or that the infant may not be born in the best possible condition.

Figure 2 - Infant deaths and risk factors in pregnancy



- 9.10 Of the 27 infant deaths, 8 (30%) mothers stated that they were smokers at the time of booking and smoked during pregnancy. Smoking in pregnancy has well known detrimental effects for the growth and development of the baby and health of the mother. On average, smokers have more complications during pregnancy and labour, including bleeding during pregnancy, placental abruption and premature rupture of membranes. Smoking during pregnancy can cause serious pregnancy-related health problems. These include complications during labour and an increased risk of miscarriage, premature birth, stillbirth, low birth-weight and sudden unexpected death in infancy.
- 9.11 Of the 27 infant deaths under the age of one, 6 (22%) were recorded as a multiple pregnancy (5 deliveries resulting in the death of twin one, twin two or both) all of which were born prematurely. Unfortunately, a number of these pregnancies also resulted in a late foetal loss (<24 weeks gestation) or stillbirth (>24 weeks).
- 9.12 Another risk factor highlighted by the Manchester CDOP was mother's increased body mass index (BMI) during pregnancy. For most adults, an ideal BMI is in the 18.5 to 24.9 range (healthy weight range). Of the 16 deaths categorised as a perinatal/neonatal event, the mothers' BMI was recorded in 15 cases. 7 (47%) mothers had a healthy BMI and a collective total of 8 (53%) mothers were recorded as either overweight, obese or severely obese at time of booking.

10.0 Summary of Manchester Reducing Infant Mortality Strategy

- 10.1 The causes of infant mortality are complex and interrelated. The strategy is organised and simplified under a number of key themes however it is recognised that this belies the complicated system wide nature of this priority.

The strategy spans five years from 2019 - 2024, allowing time for outcomes to be realised.

10.2 The five priority themes and objectives for the strategy are summarised below:

Priority Theme	Objectives
Quality, safety and access to services	<ul style="list-style-type: none"> ● Increase engagement with antenatal services - promoting the benefits of antenatal care. ● Appropriate assessment and referral during pregnancy and support during birth. ● Improve take up of flu vaccinations for pregnant women. ● Genetic counselling / genetic literacy for individuals and communities with a need. ● Raising awareness about IVF treatment outside UK.
Maternal and infant wellbeing	<ul style="list-style-type: none"> ● Support women to stop smoking. ● Support smoke free homes. ● Support maternal mental health and wellbeing. ● Reduce maternal obesity and improving nutrition. ● Encourage and support breastfeeding. ● Alcohol and substance misuse support in pregnancy and postnatally.
Addressing the wider determinants of health	<ul style="list-style-type: none"> ● Support efforts to reduce and mitigate against poverty (the most important determinant of a child's health). ● Housing - focus on the private rented sector to ensure housing is safe and warm and meets basic standards for mother and baby. ● Identify and address inappropriate environments. ● Work with Homeless Families Services to support vulnerable women and infants.
Safeguarding and keeping children safe from harm	<ul style="list-style-type: none"> ● Continue to educate on safe sleeping and supporting those most vulnerable with additional help. ● Help parents to keep a safe home environment. ● Prevent unintentional injuries (e.g. scolds and falls). ● Reduce the damage of abusive head trauma. ● Support pregnant women / mums experiencing domestic abuse.
Providing support for those bereaved and affected by baby loss	<ul style="list-style-type: none"> ● A system-wide approach to making things as easy as possible for bereaved families. ● Increase knowledge about bereavement services to improve signposting. ● Strengthen pathways to ensure people who have had a loss receive enhanced support for their next pregnancy. ● Increase the skills and confidence of the wider workforce to talk about bereavement.

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| | <ul style="list-style-type: none">● Minimum standards of care for bereavement support. |
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10.3 A Reducing Infant Mortality Steering Group has been established to coordinate and oversee the implementation of the strategy. This group reports to the Start Well Board, linking work into the Children and Young People's Board.

11.0 Progress on delivering the Reducing Infant Mortality Strategy

A range of work is taking place across services to support the strategy and a summary of key projects, services and programmes is highlighted.

11.1 Preventing Abusive Head Trauma

A new programme to prevent abusive head trauma in infants called ICON has recently launched city wide following a successful pilot last year in South Manchester. ICON stands for **I**nfant **C**rying is Normal, **C**omforting methods can help, **I**t's **OK** to walk away, **N**ever, ever shake a baby. The programme targets prospective and new parents with consistent messages about coping with a crying baby and keeping them safe at various 'touch points' including health visitor appointments, midwife visits and birth registration. Manchester is an early adopter of this programme which was launched in Hampshire and there is an aspiration for this to be adopted nationally.

11.2 Greater Manchester Smoke Free Pregnancy Programme

This programme aims to reach a target of no more than 6% of women smoking at delivery by 2021, and ultimately for no woman to smoke during her pregnancy. The programme has been launched across Greater Manchester in phases and all three hospitals are now implementing it. Key programme elements are carbon monoxide (CO) monitoring of all pregnant women at booking with all midwives specially trained), and rapid referral for specialist ongoing stop smoking support, and a risk-perception interview for those who have not quit at first scan. Early indications are that the programme is achieving positive outcomes and work is underway to develop a model to sustain the programme once the initial project funding comes to an end.

11.3 Our Manchester First 1000 Days Fund

11.3.1 A £1.1 million targeted fund for projects supporting the first 1,000 days priority of the population health plan launches during October 2019. This fund will support projects that:

- Increase, in a sustainable way, women and family support networks in their community and their use of voluntary and statutory sector support services.
- Increase the quality and quantity of social and family connections in a way that is helpful and can be maintained.
- Promote partnerships and networks to support the above approaches.

11.3.2 Only organisations already funded through the following three grant programmes will be eligible to apply for funding as the lead organisation:

- Our Manchester Voluntary & Community Sector (General Fund),
- Young Manchester (Youth & Play Fund),
- Cultural Partnership Agreement grants programme.

11.3.3 It is hoped that projects awarded funding will directly contribute to the delivery of the strategy.

11.4 Safe Sleeping Emergency Equipment Fund

The Safe Sleeping Emergency Equipment Fund is provided through the Manchester Population Health Team and is intended to ensure that essential equipment and supplies are available for pregnant women and parents at times of emergency. The fund has been established to support specific staff groups working with very vulnerable women and infants.

11.5 Housing and Infant Mortality Work

Poor housing conditions are an important determinant for infant mortality. Following a presentation of the strategy to the Connecting People Forum of Manchester Housing Providers Partnership, work is underway to develop specific guidance for housing providers on how they can support the strategy. Work is also taking place to reflect relevant issues about infant mortality into the emerging private rented sector strategy and to explore how relevant standards could be incorporated into a revised rental pledge or charter.

11.6 Healthier Weight Before, During and After Pregnancy - Public Health England Pilot

11.6.1 Manchester is participating in piloting a consistent evidence-based messaging approach for healthcare professionals to support conversations on healthier weight before, during and after pregnancy. Public Health England will pilot a scheme to embed the systematic and consistent delivery of healthier weight conversations through universal visits mandated as part of the Healthy Child Programme, making use of a published set of training tools providing evidence-based healthier weight messages.

11.6.2 An academic team from University of Teesside has been commissioned to support this work. The academic team will work with Manchester providers to consider how best they can target resources in order to address local needs and priorities, considering the health inequalities associated with maternal obesity.

11.6.3 Delivery of the pilot will be used to develop a suite of resources, including local practice examples that can be used to share learning and support the wider system to embed approaches to enable health and care professionals to have healthier weight conversations with women before, during and after pregnancy.

11.7 Peer Learning

Manchester Population Health Team has established links with public health colleagues in Sheffield and Bradford to develop a peer learning group. Both areas share similar challenges to Manchester and it will be helpful to share best practice and learning between the cities.

11.8 Vulnerable Babies Service

The Vulnerable Babies Service, provided by Manchester University NHS Foundation Trust, was established in 2004 to address the rising number of sudden infant deaths in the city. The service works with and takes referrals from professionals and volunteers who work with parents and babies and provides targeted support and case planning for families with additional needs such as substance misuse, a previous unexplained death of a child, homelessness, late booking into antenatal care.

11.9 Saving Babies Lives Care Bundle

11.9.1 The Saving Babies' Lives Care Bundle, developed by NHS England, is a group of actions for maternity services to reduce stillbirths. For Manchester this approach was introduced first into North Manchester General Hospital and has now been implemented across all three hospital sites in Manchester. The care bundle has five elements. These are:

- Reducing smoking in pregnancy.
- Closer monitoring of fetal growth restriction.
- Raising public awareness of monitoring reduced fetal movement.
- Effective fetal monitoring during labour.
- Reducing pre-term birth.

11.9.2 National evidence shows a reduction of a fifth in stillbirths in Maternity Units where the care bundle has been implemented.

11.10 Supporting pregnant women experiencing domestic violence and abuse
Domestic violence is a risk factor for infant mortality and often starts or intensifies during pregnancy. Specialist Independent Domestic Violence Advisers (IDVAs) are based within Maternity Services to provide direct support to women experiencing domestic violence and to train and advise midwives.

12.0 Conclusion

12.1 Reducing infant mortality and tackling childhood obesity are two of the biggest challenges that Manchester needs to address. There is commitment from all partners to work together on these issues with resources and energy going into this work. The increase in child poverty in the city and the complex challenges faced by families, coupled with the increase in child population, makes the task to reduce health inequality and improve health outcomes for our children more difficult.

- 12.2 Manchester's Reducing Infant Mortality Strategy has been supported by all partners. There is strong leadership from the Population Health Team and multi-agency steering group to deliver actions against the strategy. It is hoped that the latest data (waiting validation) is correct in showing a halt to our trend of increasing infant mortality rates. There is a strong commitment from all partners to not only halt the trend but to reverse it and see real reductions in Manchester's infant mortality rate.
- 12.3 The revised Manchester Healthy Weight Strategy will take a whole system approach to obesity, with multiple actions across all parts of the system. This includes changes to food, physical activity and the social environment and support for changes to individual behaviours across a whole population. New models of service provision to support children and their families to maintain a healthy weight are being piloted and developed. Partners are working together in the city to ensure there is a co-ordinated approach to promoting healthy weight and to supporting families where obesity is affecting a child's health and wellbeing.