PUBLIC HEALTH ANNUAL REPORT 2019

ROTHERHAM METROPOLITAN BOROUGH COUNCIL

Director of Public Health 2019 Annual Report

Forward

The annual Director of Public Health report continues to be one of the ways in which I can highlight specific issues that will improve the health and wellbeing of the population of Rotherham. Last year I chose to ask you, the people of Rotherham, what it means to you to be healthy, happy and well, and outlined the plans that we had to address some of the challenges in this area.

This year I have chosen to return to one of the most important areas of the life course, namely the period of life between conception and a child's second birthday, the so-called "1001 Critical Days".

Evidence shows that the first 1001 days is critical to life-long health and wellbeing. Importantly, it is not only a significant time for the child, but also incredibly relevant to parents and would be parents.

With it being acknowledged that early public investment sets the foundation for greater societal return on such investment, by paying attention to this important area now, and reducing inequalities, we can hopefully lessen expensive interventions that would have potentially been required later in life.

I hope that this report helps to showcase some of the steps that services across Rotherham are doing and planning, with the aim of laying the foundations for lifelong health for Rotherham's next generation and enabling them to realise their full potential.

https://publications.parliament.uk/pa/cm201719/cmselect/cmhealth/1496/1496.pdf

Contents

Executive Summary

This year's Director of Public Health annual report focusses on the period of life between conception and a child's second birthday (around 1001 days). This is because evidence shows that experiences during this period can have life-long consequences for health and wellbeing, and the growing understanding that some of these consequences are difficult to reverse beyond this age.

It is generally acknowledged that the earlier the public investment within the life course, the greater the societal return on such investment, owing to the prevention of conditions in later life that require more expensive intervention.

This report will consider how conditions affecting the mother before and during pregnancy affect her unborn baby and the importance of the support of partners or significant family members/friends. It will also set out the critical importance of conditions, behaviours and opportunities once the baby is born, while the brain is experiencing its greatest period of growth.

Key messages:

- Failing to invest in the well-being of women and children in the first 1001 days can have a cost to the economy of billions of pounds in reduced productivity and increased health costs.
- How well or how poorly mothers and children are nourished and cared for during this time can profoundly affect a child's ability to grow, learn and thrive.
- The first 1001 days are increasingly understood to be the most critical phase of every human life, when the foundations for their lifelong health are built.
- Investment in Public Health is essential to ensure that people's chances for a healthy and fulfilling life are not unfairly held back by the circumstances that surround the start of their life, over which they have no control.

Areas in which investment can make a significant difference to child development include:

Nutrition and diet:

During pregnancy the child's brain is principally influenced by the mother's health and nutrition, and any exposures to toxins. Advice should be that a healthy diet (it is important that expectant mothers eat well) and being physically active will benefit both the child and the mother during pregnancy and will also help her to achieve a healthy weight after giving birth. Rotherham's low breastfeeding rates are an obvious incentive for change, and a real opportunity to address a key health inequality. The benefits to both child and mother may go beyond nutrition and include attachment, immunity protection, and even protection against various forms of cancer.

Preparing for parenthood:

Being well prepared for parenthood is likely to have benefits for the future health and wellbeing of the whole family. Evidence shows that women who are healthier in pre-pregnancy have a better of chance of becoming pregnant, having a healthy pregnancy and giving birth to a healthy baby.

Teenage pregnancy is more likely to represent an unintended pregnancy, and there is evidence that pregnancy intention is important for maternal and child health. Therefore, a programme of sex and relationship education can be effective in preventing unintended pregnancies.

Promotion of healthy lifestyle behaviours:

In addition to good nutrition and diet, smoking, alcohol, drug use, and weight are all modifiable lifestyle behaviours that can have an impact on the outcome of a pregnancy and the health of the new-born child. Primary care and antenatal settings in Rotherham, together with midwives, provide opportunities to offer advice to pregnant mothers and their partners about healthy nutrition, physical activity, and health behaviour choices during pregnancy.

Mental health promotion

Maternal mental health is a major public health issue and one that is now being made a national priority. Specialist perinatal community services are being rolled out across England, including a new service for Rotherham, Doncaster and Sheffield.

The first 2 years of life

Rotherham is striving for high quality early years settings, through offering its Healthy Foundations accreditation. High-quality childcare should be understood to be more than simply providing a safe place for children but should also include the provision of nurturing relationships and stimulating environments.

Rotherham's Children's Centres/Early Years and the 0–19 Integrated Public Health Nursing Service (IPHNS) represent a key vehicle for addressing inequality, provided they reach those families with the most need and are effective in influencing the home learning environment and the parents' skills for being the primary educators for their child.

The first 1001 days offer a unique opportunity to influence future health states of the Rotherham population. Investing at this stage of life should bring huge social benefits and considerable savings in the long term. The effects of any investment may still be apparent in future generations.

Introduction

Why 1001 days?

This year's Director of Public Health annual report is focusing on the period of life between conception and a child's second birthday (around 1001 days). This is because of the growing body of evidence which shows that experiences during this period can have life-long consequences for health and wellbeing, and the growing understanding that some of these consequences are difficult to reverse beyond this age.

It is generally acknowledged that the earlier the public investment within the life course, the greater the societal return on such investment, owing to the prevention of conditions in later life that require more expensive intervention.

Failing to invest in the well-being of women and children in the first 1001 days can have a cost to the economy of billions of pounds in reduced productivity and increased health costs. 'Investment in Public Health is essential to ensure that people's chances for a healthy and fulfilling life are not unfairly held back by the circumstances that surround the start of their life, over which they have no control'[1].

Unsurprisingly, some leading economists have called for greater investments in the nutrition and well-being of parents, babies, and infants as one of the best ways to increase prosperity for all.

1001 days – a window of opportunity

The first 1001 days are a time of unique potential and vulnerability. During this time so many health and developmental advantages and disadvantages are laid down with lifelong consequences for an individual's life chances. How well or how poorly mothers and children are nourished and cared for during this time can profoundly affect a child's ability to grow, learn and thrive. Moreover, a baby brought up in a supportive environment, within a strong loving partnership with a committed other/s, can have a huge impact on their wellbeing.

The first 1001 days are increasingly understood to be the most critical phase of every human life, when the foundations for their lifelong health are built.

However, we know from the science that not every baby born in Rotherham has the same opportunities as their peers for a healthy and fulfilled life. This can be caused by several parental behaviours such as smoking and drinking alcohol during pregnancy, not eating a balanced diet and taking little exercise.

Therefore, there is not only an economic motivation for investing in the earliest stage of life, there is also a health equity imperative. Investment in Public Health is essential to ensure that people's chances for a healthy and fulfilling life are not unfairly held back by the circumstances that surround the start of their life, over which they have no control.

As an example, maternal nutrition through pregnancy and choices for feeding and weaning in the earliest parts of a child's life play a fundamental role in development and the potential to thrive. Poor nutrition in the first 1001 days can set up an irreversible disadvantage in the development of a child's brain and other organs, and can set the stage for later obesity, diabetes, and other chronic diseases which can lead to a lifetime of health problems[2].

This report will consider how conditions affecting the mother before and during pregnancy can also affect her unborn baby. It will also set out the critical importance of conditions, behaviours and opportunities once the baby is born, while the brain is experiencing its greatest period of growth. It will also take into consideration whether even the conditions our grandparents experienced in the first 1001 days of their lives may exert an influence on our own health expectations and vulnerabilities to disease.

Finally, whilst the home environment is the key setting within which the first 1001 days plays out, there are some key settings provided through public investment that also play an important role, and indeed a number of services that reach into that home environment that can support or enable a better first 1001 days. The report will include ‘case study’ descriptions of some of the assets that Rotherham already has in this respect.

Chapter One - The First 1001 Days – A legacy for life

David Barker, a physician and epidemiologist, is a key figure in the growing understanding of the foetal origins of adult disease. His hypothesis is that the conditions in which the foetus develops have profound consequences for lifetime health[3]. This does not undermine the importance of lifestyle factors for avoiding chronic disease, but rather that vulnerabilities to such disease are set up at the earliest possible stages of life, which might mean one individual may find themselves far more dependent than another on maintaining a good lifestyle for continued health.

Importantly, this theory is not just about brain development. There are phases during pregnancy when the major organs are formed, where the nutrition of the foetus is of critical importance. With the exception of the brain, liver and immune system, which remain 'plastic' after birth, the structure of all the organs is laid down in the foetus, within narrow time windows of foetal growth, meaning that the conditions at those times can have life-long consequences.

In recent times, the diet of the United Kingdom has been characterised by an abundance of high-sugar and high-fat food, which evidence suggests may also be having health impacts on the unborn baby. In this respect, it is not just low birth weights that are associated with later health risks; babies are at risk of obesity in later life both when they are born too small and too large[4].

Beyond nutrition the mother can ingest other substances that can affect the unborn child. Smoking during pregnancy and alcohol or other forms of substance misuse are the most obvious, but there is also now evidence that living in areas with polluted air may be having some effect on the unborn child[5].

The first two years of life

Nutrition

The critical 1001 days enters a new phase once a child is born, and one of the very first things that will happen within the healthcare context is that the infant will be weighed and measured. Growth patterns from this point onwards will continue to be measured during early life and have similar significance to growth in the womb, both of which can affect later life outcomes.

The speed of postnatal growth is highest following birth, when an infant is still entirely dependent on its mother or primary carer for obtaining nutrition. The health risks arising from insufficient nutrition in this phase are self-evident, but the prevailing cultural belief that rapid growth is always good may not be a helpful one, as rapid catch-up growth or excessive weight gain may be linked to obesity later on and other risks[6].

The earliest nutrition a new-born child receives is milk, either through breastfeeding or through bottle feeding. Compositional regulations ensure that infant formula meets the basic nutritional needs of the exclusively formula fed infant. However, it must be remembered that breastmilk remains nutritionally superior due to a number of components that cannot be replicated in formula and additionally provides non-nutritional benefits, including immunity protection and hormonal processes that support bonding and attachment[7].

The types and quantities of food given to an infant, and how these are prepared and administered (e.g. spoon-feeding versus self-feeding) are all likely to be important for setting up eating preferences and habits, which might have a lifelong impact, through a complex mixture of microbiological, nutritional, social and psychological influences[8].

Attachment

Early on, infants seek closeness and safety through attachment to others, and are likely to form secure attachments where their primary caregiver responds appropriately to their needs. For this reason, parenting styles in the first 1001 days are seen as critically important to establishing a secure attachment which in turn benefits the child later in life[7].

Most of the research considers the maternal role in this context, but there is also evidence that increased and enhanced paternal engagement is linked to positive outcomes including better levels of cognitive and social performance and academic achievement[9].

Brain development

Brain growth following birth is rapid, growing from 25% of its adult weight at birth to 75% by age two[1]. This is mirrored over the same period by the attainment of significant developmental milestones, as gross and fine motor skills develop, and cognitive and sensory skills develop, enabling the infant to move from being a new-born, entirely dependent on its parent for survival, to becoming an increasing independent toddler.

During pregnancy the child's brain is principally influenced by the mother's health and nutrition, and any exposures to toxins. Following birth, brain growth is rapid, as is the creation of connections between brain cells. A new-born child's brain is highly receptive to external stimuli and creates such connections at an astonishing rate in response – more than one million connections per second are created during the first eighteen months of life.

Early experiences affect the quality of that architecture by establishing either a sturdy or a fragile foundation for all the learning, health and behaviour that follow[10].

Chapter Two – Key Influencers on the First 1001 Days

Socio-economic

Socio-economic circumstances play a very important role in influencing the conditions and circumstances that affect every child during the first 1001 days.

For young children it is clearly not only material wealth that matters. The 'ecological perspective' on child development locates a child's wellbeing in the context of the family, friendship networks, early childcare settings and the neighbourhood, rather than solely in the context of material wealth.

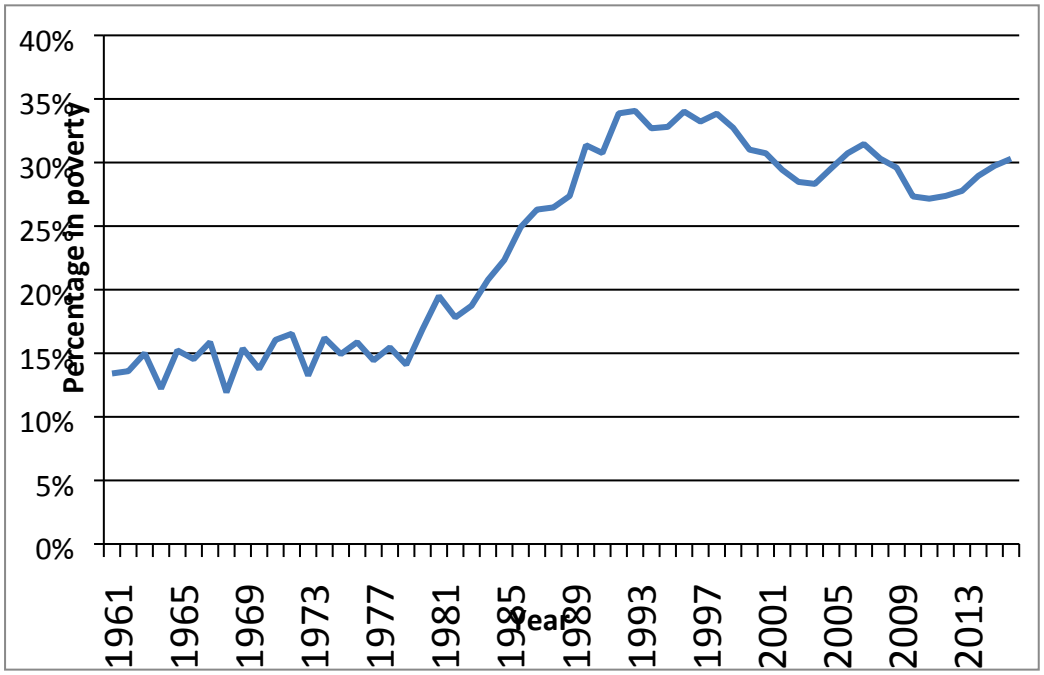
Parenting styles are affected by income and employment stresses; some harmful personal behaviours by parents might be seen as coping strategies (e.g. smoking and drinking); housing conditions are likely to be poorer and may have a direct negative health effect on a child (e.g. cold, damp homes), or may have a constraining effect on a child's stimulation or capacity to learn; harmful environmental exposure may also be more prevalent in less affluent neighbourhoods (e.g. proximity to traffic causing more polluted air).

Income and inequality

Income inequality is correlated with so many social and economic factors that impinge on the health of a child and its parents during the first 1001 days. Lower income is likely to, but not necessarily, mean poorer quality housing and local living environments, poorer parenting skills, poorer nutrition and greater likelihood of harmful environmental exposures.

Child poverty in the UK has doubled since 1960 as shown in Fig 1:

Fig 1: The doubling of child poverty in the UK since 1960:



The Joseph Rowntree Foundation has looked at impacts of poverty on parenting. Poor families are more likely to have non-traditional family structures (such as lone parenting); be headed by a teenage parent; have a sick or disabled child; have a child (or children) under

five; and to have many children. The parental stresses of living in low income may also predispose towards less nurturing parenting styles[11].

Addressing the inequality is a key priority for Rotherham, where the Council vision speaks of building “a town where opportunity is extended to everyone, where people can grow, flourish and prosper, and where no one is left behind”, and the Health and Wellbeing Strategy is underpinned by a commitment to reduce health inequalities.

Environment

Air quality

Air pollution is the largest environmental risk to the public’s health, and there is growing evidence that it may even be causing damage both before and during pregnancy.

Research has previously found an increased risk of miscarriage from long-term exposure to dirty air, and more recent research has pointed to an increased risk arising from short-term increases in exposure to nitrogen dioxide (NO_2), a very common contaminant, produced by internal combustion engines[12].

The mechanism by which unborn children are affected by polluted air is not certain, but other recent research has shown that air pollution particles can cross to the foetal side of the placenta[13].

Rotherham is taking actions to address areas of high concentration of NO_2, for example, through measures to restrict traffic speeds, but there will always be some pollutants in the air. There are opportunities for individuals to make a difference, both with respect to their contribution to air pollution, and in what they can do to reduce exposure, such as avoiding busy roads, where concentrations are likely to be higher.

Housing

Children living in cold homes are more than twice as likely to suffer from respiratory problems than children living in warm homes, and children in deprived areas are nine times less likely to have access to green space and places to play[14].

Poor housing is cited as an example of social stress that can act against the ability of parents to provide a secure, healthy, nurturing environment during the early years of a child’s life. This in turn can adversely affect a child’s health, for a child’s home environment exerts an important influence over their future health and development[15].

Opportunities

Primary schools are places where in the mornings and afternoons there are likely to be a number of pregnant mothers, as well as infant and baby siblings of children at school. Bans on idling of car engines or the provision safe walking routes to school, away from busy roads and preferably with vegetation to screen out pollutants, could give opportunities to provide cleaner air.

Advice on cheaper energy suppliers and home improvements for more efficient heating and insulation could also be targeted to young family households.

Health behaviours

Adverse Childhood Experiences (ACE)

Research has demonstrated an association between traumatic experience in childhood with health and social problems across the lifespan[16].

Fig 2: Ten Types of Adverse Experiences

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Felitti and Anda defined ten types of adverse experience (shown in Fig 2 above), and their findings were that the number of experiences was a key predictor of the likely long-term impact. For example, individuals from the study who had faced 4 or more categories of ACEs were twice as likely to be diagnosed with cancer compared with individuals who hadn't experienced childhood adversity[16].

As a social determinant of health, ACEs sit firmly within the context of social inequalities, since higher levels of poverty and unemployment tend to correlate with greater prevalence of traumatic experiences during childhood[17].

Chapter Three – Preparing for Parenthood

Children born into secure families that respond to their physical and emotional needs are more likely to grow up to achieve well academically and to enjoy a healthier and more financially secure adult life. Furthermore, they are more likely to give their own children the same good start in life.

The health of a would-be parent even before the start of the 1001 days is an important factor in giving every child the best start in life. Being well prepared for parenthood is likely to have benefits for the future health and wellbeing of the whole family.

Teenage pregnancy

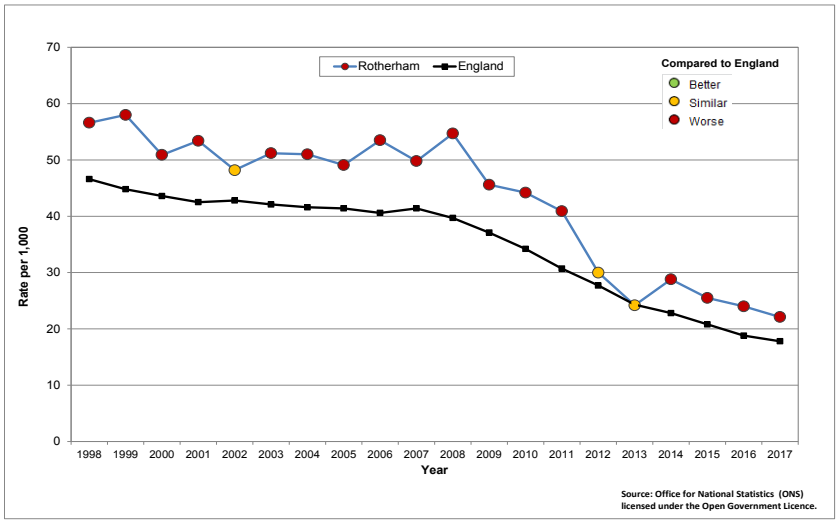
Teenage pregnancy rates are generally higher amongst the most deprived and socially excluded young people. Although being a teenage mum can be a positive experience for some, evidence suggests that it can contribute to some negative long-term outcomes[18].

Becoming a mother under the age of twenty does not necessarily present health risks, and indeed a woman's fertility naturally declines with age. However, social factors, including the period of formal education and the age of independence from parents and becoming economically active mean that there is some social stigma attached to teenage pregnancy, and there is likely to be an economic impact associated with starting a family at this age. It is also more likely that teenage pregnancy represents an unintended pregnancy, and there is evidence that pregnancy intention is important for maternal and child health[19].

It should be noted that across the country there has been a steep drop in rates of teenage pregnancies in recent years. There are a range of theories about what might explain this dramatic decline, and it seems likely that it is associated with a few related social changes and some specific policy interventions, including education and access to comprehensive sexual health services.

Rotherham has not missed out on this steep decline (a 60% reduction in the under 18 conception rates between 1998 and 2017) but remains in a comparatively poor position when compared to the region and to England.

Fig 3: Rates of teenage conceptions (per 1,000) in Rotherham and England



A programme of good quality sex and relationship education can have beneficial effects in terms of sexual health behaviour (e.g. by delaying onset of sexual activity, reducing the number of partners and increasing knowledge about methods and availability of contraception).

Whilst the proportion of Year 10 (age 14-15) Rotherham children saying that they have had sexual intercourse has generally been going down in recent years, there is also some evidence that those who are sexually active are more likely to have had sex after taking drugs or alcohol, and less likely to have used contraception (The Rotherham Voice of the Child Lifestyle Survey 2019).

Fitness for pregnancy

Evidence shows that women who are healthier in pre-pregnancy have a better of chance of becoming pregnant, having a healthy pregnancy and giving birth to a healthy baby[20] [21].

Smoking, alcohol, drug use, weight and diet are all modifiable lifestyle behaviours that can have an impact on the outcome of a pregnancy. Whilst there may be an increasing awareness of the need to modify smoking and alcohol behaviours in preparation for pregnancy, there is still a low level of awareness of the importance of good diet and nutrition and the potential problems that are associated with obesity in pregnancy[22].

Diet and weight

In Great Britain, the latest figures show that for the first time more than half (50.4%) of women with a recorded Body Mass Index (BMI) at their first midwife appointment were overweight or obese, with 22% of women classified as obese at the start of a pregnancy (BMI>=30)[23]. Furthermore, about a third of women gain too much weight during pregnancy, and this is more likely in those classified as overweight or obese. However, if a pregnant woman is obese, this will have an influence on her health and the health of her unborn child, so it is more important, where possible, to help obese and overweight women lose weight before they become pregnant.

Fig 4: Risks associated with maternal obesity[24]

Risks to mother	Risks to foetus/child
Maternal death or severe morbidity Cardiac disease Miscarriage Pre-eclampsia Gestational diabetes Increased risk of Caesarean Section	Stillbirth Neonatal death Congenital abnormalities Prematurity Lower breastfeeding rates Increased risk of obesity and metabolic disorders in childhood

Women are advised to take a supplement of 400 micrograms of folic acid each day, from before pregnancy and for the first 12 weeks once pregnant, to help reduce the risk of conditions like cerebral palsy, highlighting another potential advantage of a planned pregnancy.

Smoking and alcohol

Smoking and alcohol use by parents prior to conception can make it more difficult to conceive.

Smoking is known to impact negatively on male and female fertility. Smoking by men intending to become fathers not only affects their semen in terms of lower sperm counts and lower motility but is also likely to expose their partner to second-hand smoke, with consequent impacts on female fertility[25].

The influence of alcohol on male and female fertility is not comprehensively understood, but reducing alcohol consumption when trying to conceive is sensible advice[2641]. Official guidance recommends that couples abstain (from alcohol) in this situation.

Opportunities

From September 2020 there will be compulsory relationship education in all primary schools, and compulsory sex and relationship education in all secondary schools, as well as compulsory health education. This presents opportunities to raise awareness of the importance of pre-pregnancy health, including diet and nutrition and healthy lifestyle behaviours when planning pregnancy, as well as advice on the importance of planning for pregnancy.

Evidence suggests that where people receive advice from health professionals, they are more likely to make changes to their behaviour before pregnancy, so there are likely to be opportunities to make every related contact count, for example when young people attend a sexual health clinic[27].

Women who receive counselling prior to pregnancy are three times more likely to quit smoking before conceiving than those that don't[28].

Sensible preconception advice to men would be to quit smoking three months before attempting to conceive, as sperm take about this length of time to mature.

Chapter Four – Pregnancy

Once a woman becomes pregnant, her unborn baby's nutrition and development is dependent on her own health/her lifestyle behaviours and that of her partners or support networks. Poor nutrition during pregnancy may influence the growth of key anatomical features in a way that can increase the risk of future health problems.

Pregnancy is also an opportunity, as a strong motivator for behaviour change, with potential benefits to the unborn child, the mother, partners/support networks, any future pregnancies, and even for future generations.

Communicable diseases

Some communicable diseases also present a higher risk in pregnancy. For this reason, in the UK all pregnant women are offered the seasonal flu vaccine and the whooping cough vaccine and may be advised to have the hepatitis B vaccine if at risk. In Rotherham about 8 in 10 women take up the whooping cough vaccine, better than the England average. Provisional data from PHE shows 45.1% of Rotherham women who were pregnant took up the seasonal flu vaccination in monthly data 1 September 2019 to 29 February 2020 (cumulative uptake); England was 43.7% in comparison[29].

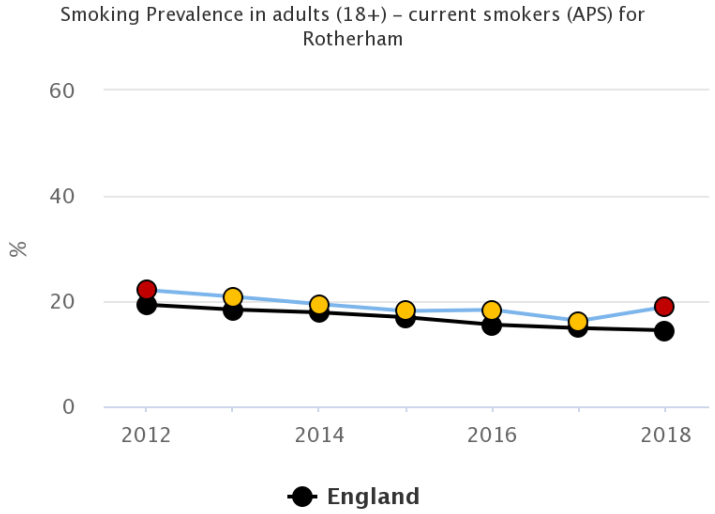
Smoking in pregnancy

Smoking is the leading cause of preventable illness and premature death in England, with about half of all life-long smokers dying prematurely[30]. Smoking in pregnancy creates an additional potential harm to the growing foetus, as toxins present in tobacco smoke can cross the placenta. Smoking also reduces the amount of oxygen that can reach the baby, which can restrict growth – babies born to smoking mothers tend to weigh less at birth[31]. Smoking in pregnancy risks are shown in the diagram below:

Fig 5: Smoking in Pregnancy – Health Matters PHE

In Rotherham 18.9% of adults were current smokers in 2018 (Annual Population Survey - APS). This has been in general decline since 2012, but with an apparent upturn in 2018, and has remained worse than the England proportion (14.4%) and the regional one (16.7%).

Fig 6: Smoking Prevalence in adults (18+) – Current Smokers (APS) for Rotherham



It is obviously preferable if women manage to quit smoking in preparation for becoming pregnant but stopping smoking at any point in the pregnancy is a positive action with some benefit for both mother and child. In Rotherham there is a dedicated small team, the Stop Smoking in Pregnancy Service (SSPS), who work with pregnant mothers who smoke, helping them to make informed choices about their smoking habit, and to offer support to help them adopt a healthier lifestyle during pregnancy.

Fig 7: Smoking Risk Perception Tool - Stop Smoking in Pregnancy Service (Rotherham NHS Foundation Trust)

- The Service comprises of two (full time) Smoking in Pregnancy Midwives, two (4 days a week) Stop Smoking in Pregnancy Advisors, and one (1 day a week) Administration support, based at the Antenatal Clinic, Greenoaks.
- The Service developed a revolutionary pathway to engage and motivate women and their partners, which has had a huge effect in reducing the percentage of mums smoking during pregnancy.
- This pathway has been embraced by both Newcastle University & Teesside University and called 'The Risk Perception Tool'. The Universities developed a package incorporating a tool called babyClear©. It is now used widely across the UK.
- A key requirement of the Risk Perception Tool is for **all** pregnant women to have routine Carbon Monoxide monitoring tests at every visit and for an '**Opt Out'** system for referrals into the Stop Smoking Service.
- A smoking in pregnancy midwife will see all pregnant smokers attending Greenoaks to support them to stop smoking, using their expertise and a personalised approach, supported by visual aids and dispelling any potential myths.
- Women are supported to stop smoking by initially seven weeks of weekly face to face support, then monthly visits throughout pregnancy and at least once post-natal. This results in the team forming close relationships with mothers and their families, providing a unique insight into their lifestyle choices. It also offers the opportunity for appropriate sign posting to the Multidisciplinary team or the 0-19 Integrated Public Health Nursing Service (IPHNS) for either pregnancy related or health issues such as mental health and social care.

"The issue is that many mums feel guilty about their smoking habits and don't want to admit to smoking. It's our job to let them know the full extent of the risks they are taking and benefits of stopping smoking so that they can make an informed decision. In many cases women know that smoking is not healthy but are not always aware of the risks and the impact of it". Wendy Griffith, Smoking in Pregnancy Lead Midwife.

The Service makes use of some innovative Risk Perception methods (see Fig 7), which includes working with parental partners who smoke, and promoting smoke-free homes. The number of women who smoke in pregnancy in Rotherham is high when compared regionally and nationally. However, the Service has had some recent success in reducing the proportion of women smoking in pregnancy and has managed to meet its target of fewer than 18%.

Unfortunately, this still means that a minimum of around 500 babies are born each year in Rotherham to mothers who smoked during pregnancy. Furthermore, a systematic review from 2016 suggests that as many as 43% of women who did manage to quit in pregnancy have restarted smoking by six months after giving birth, giving rise to further risks to the health of both mother and child at such a critical phase[32].

Nutrition during pregnancy

Studies have shown the risks to foetal development associated with under-nutrition during pregnancy, and it is important that expectant mothers eat well. However, it is also true overeating can have adverse consequences, but the concept of 'eating for two' may still be ingrained culturally.

Dispelling the myth about eating for two is important, but it is also important that women are advised not to lose weight during pregnancy, as this may harm the health of the unborn child. There are currently no evidence-based UK guidelines on recommended weight-gain ranges during pregnancy[33]. Therefore, the advice should be that a healthy diet and being physically active will benefit both the child and the mother during pregnancy and help her to achieve a healthy weight after giving birth.

Women are also given advice about foodstuffs to avoid during pregnancy, mostly owing to increased risks of infection. These are set out comprehensively on the NHS website https://www.nhs.uk/conditions/pregnancy-and-baby/foods-to-avoid-pregnant/. Whilst a good balanced diet should ensure most essential nutrients are obtained during pregnancy, supplements of folic acid and vitamin D are also advised for pregnant women.

The NHS website also has a very good guide to a healthy diet in pregnancy, https://www.nhs.uk/conditions/pregnancy-and-baby/healthy-pregnancy-diet/, which includes advice on vitamins, supplements and other nutrition, and also links to the Healthy Start programme. Eligibility for free Healthy Start vouchers can be checked via a postcode search and then the vitamins can be collected from a range of Children's Centres and Pharmacies in Rotherham. However, uptake has not been high in Rotherham, and a new approach is now being trialled by the Acute Trust to try to ensure that *all* mothers seen by health visitors are given the vitamins.

Physical activity for pregnant women

With respect to physical activity, 30 minutes a day of moderate-intensity activity is beneficial, but women who have not routinely exercised prior to becoming pregnant should start slowly. The diagram below shows an ideal approach:

Fig 8: Physical Activity for Pregnant Women[34]

Alcohol in pregnancy

The Chief Medical Officers for the UK recommend that if you are pregnant or planning to become pregnant, the safest approach is not to drink alcohol at all to keep risks to your baby to a minimum. Drinking in pregnancy can lead to long-term harm to the baby, with the more you drink, the greater the risk. When a pregnant woman drinks, alcohol passes from the blood through the placenta and to the baby. A baby's liver is one of the last organs to develop and does not mature until the later stages of pregnancy. The baby cannot process alcohol as well as the mother can, and too much exposure to alcohol can seriously affect their development.

Drinking alcohol, especially in the first 3 months of pregnancy, increases the risk of miscarriage, premature birth and your baby having a low birthweight. Drinking after the first 3 months of pregnancy could affect the baby after they're born. Drinking heavily throughout pregnancy can cause the baby to develop a serious condition called foetal alcohol syndrome (FAS). Symptoms include poor growth, distinct facial features, learning and behavioural problems[35].

The NHS website has a good guide on the impact of drinking during pregnancy https://www.nhs.uk/conditions/pregnancy-and-baby/alcohol-medicines-drugs-pregnant/

Opportunities

Since influenza infections have been shown to increase among smokers compared to non-smokers (and are more often severe)[36], the smoking in pregnancy service offers an opportunity to increase the uptake of the flu vaccine by pregnant women in a targeted way.

Rotherham's community midwives and outpatient clinics (Greenoaks) already check vaccination status of pregnant women and offer the flu vaccine as appropriate but will look at opportunities to strengthen the advice for smokers.

Primary care and antenatal settings, and midwives, provide opportunities to offer advice to pregnant mothers and their partners about healthy nutrition, physical activity, and health behaviour choices during pregnancy. Schools, through their Personal, Social and Health Education (PSHE) sessions and the upcoming compulsory Relationships and Sex Education (RSE) teaching, provide an opportunity to influence the next generation of parents, both male and female, and to remove the culturally persistent concept of 'eating for two'.

Chapter Five – The First 2 Years of Life

Education

Before the age of two, it is likely that children will spend a lot of time at home, however, most parents then face a choice (often driven by a financial imperative) of whether/when to re-enter employment and how to ensure their child is properly cared for.

Research on early childhood education in the UK does provide evidence of benefit from high quality early childhood education[37], but has largely considered such provision for children aged 3-5.

In this context, high-quality childcare should be understood to be more than simply providing a safe place for children but should also include the provision of nurturing relationships and stimulating environments. The development of an infant's executive function can be stimulated through something as simple as a game of peekaboo[38]. Play England, The Playwork Foundation and The International Play Association England joined forces in 2019 to develop a 'A Manifesto for Play: Policy Proposals for Children's Play in England'[39]. (See link; https://www.playengland.org.uk/a-manifesto-for-play-2/)

It was a call for political parties to include in their Manifestos:

1. **Leadership** – create a Cabinet minister for children with responsibility for play
2. **Legislation** – make planning for play a statutory duty
3. **Investment** – more and better play opportunities, spaces and services for children including play in in parks and public spaces, playgrounds, housing, play streets, after school and holiday play schemes, adventure playgrounds and schools
4. **Delivering for play** – investment in quality support and training for professionals.

Whatever quality of early years support is provided by Practitioners, parents inevitably exert a greater influence on their child's development in the earliest stages of life, and it is clear that a positive early years home learning environment can provide many benefits for improved cognitive, social and physical development of children.

What happens in our early years settings, especially our Children's Centres, and the extent to which they are able to reach those parents most in need and to positively influence how they interact with their children at home is a key consideration for a good 1001 days experience for Rotherham's most disadvantaged young children.

Rotherham position

Rotherham is striving for high quality early years settings, through offering its Healthy Foundations accreditation. The aim is for settings to self-evaluate against certain criteria and to attain standards in order to achieve accreditation.

Fig 9: Healthy Foundations Case Study

Healthy Foundations is an accreditation scheme, offered by Rotherham Council, to encourage 'healthy' early years settings in Rotherham. Introduced in 2017, the accreditation is available to any private sector childcare service, including nurseries and child minders, who look after children between the age of 0 – 5 years old.

This locally developed accreditation scheme has a range of benefits. For child minders and other care givers, it allows them to gain a recognised award which gives them the skills to implement into their own practice.

Healthy Foundations covers six elements over 3 stages: Bronze, Silver and Gold. In order to get the accreditation, each childcare provider must complete each element. At the end of the course, a panel decides whether to award accreditation to the Provider based on evidence given at each element.

Bronze
- Whole setting Approach and Ethos
- Healthy Eating & Oral Health

Silver
- Exercise, Movement, Rest and Sleep
- Emotional Health and Well Being

Gold
- Managing Behaviour and Independence (Personal, Social and Emotional Development - PSED)
- Managing Dangers and Risks (Safe and Healthy Environment)

Children Centres/Early Help

Children's Centres in Rotherham offer a wide range of provision to support children in reaching early years milestones and being 'school ready' when they enter mainstream education.

The Sure Start programme was introduced to provide 'under one roof' services for young children and their families. In 2016, this ethos was broadened to a **whole family approach** and Children's Centres were a key component in the development of an effective Early Help Offer, which integrated a range of services into one Early Help & Family Engagement Service. The now well-established integrated Service supports children aged 0-19; families and has a specific focus on the first 1001 days focus with the following interventions:

Triple P Positive Parenting Programme Series

A parenting and family support system designed to prevent, as well as treat, behavioural and emotional problems in young children through to teenagers. It aims to prevent problems in the family, school and community before they arise and to create family environments that encourage children to realise their full potential.

Triple P draws on social learning, cognitive behavioural and developmental theory as well as research into risk factors associated with the development of social and behavioural problems in children. It aims to equip parents with the skills and confidence that they need in order to be self-sufficient and to be able to manage family issues by themselves and without ongoing support. Whilst it is almost universally successful in improving behavioural

problems, more than half of Triple P's 17 parenting strategies focus on developing positive relationships, attitudes and conduct. Triple P is delivered in four formats:

- Triple P 0-12
- Triple P Teen
- Triple P Online
- Triple P Stepping Stones (for parents who have a child with disabilities)

Family Links – The Nurturing Programme

The Nurturing Programme is a 10-week programme for parents with children 0-8 years that aims to improve the emotional health of both adults and children whilst strengthening family relationships. It is a cognitive-relational programme, providing parents with new skills in listening and communicating with their children and developing an understanding of behaviour in the context of relationships. It is based upon four constructs or building blocks: self-awareness, appropriate expectations, positive discipline and empathy.

Sleep Tight

This 5-week course designed by the Children's Sleep Charity, helps parents understand the impact of poor sleep on behaviour. The programme supports families to implement creative and evidence-based methods of improving sleep patterns in young children. Areas covered include diet, environment, physical and mental health and routines to help both parents and children have a better night's sleep.

Caring Dads

This is a sixteen-week validated programme for men who have abused or neglected their children or exposed them to domestic violence. The goals of the Caring Dad's group are to improve the fathers' relationship with their child and family, and to help them to better understand children's developments and needs. Some of the topics explore:

- Recognising unhealthy, hurtful, abusive and neglectful behaviours
- Effect on children of exposure to the abuse of their mother
- States of child development – what to expect
- Problem solving in difficult situations and managing frustration
- Alternatives to punishment
- Rebuilding and healing

Parents as Partners

The Parents as Partners Programme is a validated, group work programme for parents who are struggling with conflict and stress in their parenting and relationships. It explores the whole family dynamic and has proven results in helping:

- Improve parental relationships and communication (whether living together or apart)
- Strengthens the family relationship and improves the child's wellbeing and success
- Helps parents to manage the challenges and stress of family life
- Reduces conflict in the relationship

As well as group interventions the Early Help Service, through its Children's Centres, delivers a range of interventions that seeks to engage children and families in positive activities that will assist child development and support positive outcomes. Examples of this are Baby Massage groups (see Fig 10); Stay & Play interventions; and Cook & Taste sessions.

The Family Support element of the Service supports children and families with additional and/or complex needs through a comprehensive assessment and plan (Early Help Assessment) which then identifies specific need and offers intensive support.

Fig 10: Baby Massage Intervention: Case Study

As part of Rotherham Council's Early Help offer, Baby Massage classes help parents and care givers to bond with their babies.

The Council's Early Help Outreach and Engagement Worker for the South Locality, Fran Dawson, explains the benefits of Baby Massaging classes.

"Baby Massage is delivered as a 4-week rolling programme offered across the Borough. The Service supports babies aged between 6 weeks to 6 months. Between April 2019 and December 2019, one Locality worked with 110 babies and 117 care givers, including 11 male care givers.

Parents and babies that are invited to the classes are identified by Health Visitors. We have a range of parents who come along; some need that extra support, whilst others just want to have social interaction with other parents in their area.

In my locality there are six members of staff that deliver this Programme. Usually, classes are no bigger than eight attendees which means a maximum of 8 babies and their care givers, but 1:1 support can be given in the home if the family need this.

The classes are not only a great way for partners, family members and carers to bond with the baby, the intervention also helps to improve sleep patterns and reduce colic. We encourage positive interactions between parent and child, promoting early speech and language development by enabling parents to become familiar with using baby-speak.

Baby massage helps with baby brain development which is linked to the attachment with their care giver. The Service makes sure that parents, guardians and grandparents have everything that they need to continue using baby massage at home as during the class, it's not always the best time to attempt a massage, especially if baby is fussy or sleeping.

My Locality has had a fantastic response to the classes. Parents are always telling us how much of a positive impact the classes have had on their child's routine and health, whilst also helping to develop the parent's confidence at the same time. From the baby massage class, we then recommend that parents use our other services, including our Stay and Play Toddler Groups, which enables us to continue giving parents and babies the support and socialisation that they need."

Positive impacts of Baby Massaging Classes

- Research shows increases bond/attachment between care giver and baby
- Tummy strokes help to reduce colic
- Helps to reduce postnatal depression through peer support and creating friendship groups
- Encourages carers to access support from Practitioners for other needs as well as allowing identification of causes for concern, for both care giver and baby much earlier in the development of a problem
- Attendees become more confident in handling their child and better at recognising their baby's needs
- Improved positive interaction with their baby
- Improved sleep for their baby by supporting families with building basic routines

The Rotherham 0-19 Integrated Public Health Nursing Service

The Rotherham 0-19 Integrated Public Health Nursing Service (IPHNS) offers a variety of services to the children and families of Rotherham to support them in achieving optimum health outcomes for their children.

The Health Visitors, School Nurses and Nursery Nurses within the Service contribute to the delivery of the Healthy Child Programme. All mothers in Rotherham are offered an antenatal contact and following the birth of their babies, a new birth visit and a 6-8-week visit. During these contacts key public health measures are explored including, breast feeding, positive attachment, safe sleep, smoking cessation and home safety. Further assessments are carried out by the wider team at appropriate times. The 2-year assessment is carried out where possible within the child's educational setting to ensure a holistic assessment is completed.

The Service offers "Well Baby" clinics where parents can book on to see a health professional to explore and discuss any concerns they may have regarding their child's health or development. All localities also receive regular introducing solid food sessions which is carried out in groups to introduce weaning and a healthy diet.

Where additional needs are identified, either by the family or other professionals, an evidence based targeted programme of support will be offered to the family by our practitioners in partnership with other agencies when required. The Service also works with families where there maybe safeguarding concerns and contribute to the wider planning to support these families when they need it the most.

Looked After Children (LAC) Nursing Service

The LAC Nursing Service was established in September 2019. The team support the health needs of all the looked after children across the Borough. Each child has a named Practitioner who will support them on their journey and complete their health assessments reviews, as well as offer regular input and support when required.

Early Attachment Service

The Early Attachment Service offer a targeted service to parents in Rotherham. The Service offer families 1-1 support where there maybe concerns around attachment issues. The specialist work they offer includes numerous evidence-based programmes including The Solihull Approach https://solihullapproachparenting.com/quick-guide-to-the-solihull-approach/ and Video Interactive Guidance https://www.videointeractionguidance.net/aboutvig. All first-time parents in Rotherham are also offered a six-week group session during the antenatal period with a specific focus on attachment.

Young Parents Service

The young parents service offers the Healthy Child Programme to all parents under 20 across Rotherham. This group receive a targeted increased offer to meet their individual needs as teenage parents. The Nurses in the team have specialist skills to engage and optimise the outcomes for these families where possible. The Service will work with the families up to the age of one or if additional need is identified until their babies turn two. The families are then transferred back to the 0-19 IPHNS.

Health Improvement Team (HIT)

The HIT offers a variety of training in a number of settings. These include tooth brushing clubs, training to schools on dental care, weaning advice and support as well as maintaining an active Facebook page for our families.

Breast Feeding Support

An Infant Feeding Co-ordinator for the 0-19 IPHNS has been in post from August 2019 to develop, promote, support breastfeeding and to drive improvements in infant feeding practices. A staff training programme has been developed to increase staff skills, knowledge and confidence in supporting parents with infant feeding and parent/infant relationship building. An audit programme will monitor standards and evidence improvements across the service. Rotherham are currently working towards meeting the Stage Two Assessment criteria for UNICEF UK Baby Friendly Initiative accreditation. The Service:

- Continues to support the Breast Buddies™ service, working in collaboration with Rotherham Early Help Children's Centres, by training mothers with breastfeeding experience to provide support for new, expectant and breastfeeding mothers. A proportion of Outreach & Engagement workers have completed breast feeding training and can offer the same support as a Breast Buddy in any group, one to one or over the phone.
- Is commissioned to train 20 volunteers per year and is on track to meet the target.

Fig 11: Breast Buddies Case Study – October 2019

Below is a case study of a Breast Buddies personal journey which perfectly illustrates the value of a peer support service:

"I was breast feeding for around six months when I became aware of the Breast Buddies training course. I was shocked to find that the UK's breast-feeding rates were low and in Rotherham were below the UK average. I had heard that eight in ten women stop breast feeding before they would have liked to, and this inspired me to search for a course to enable me to support local women with their breast-feeding journeys.

I found the Breast Buddies Facebook page with details of the course and where I could support Mums. I completed the Breast Buddies training course in July 2018 and began volunteering at the Dinnington and Arnold Children's Centres every week where I supported many mothers with breast feeding. I was able to provide support with positioning and attachment, common breast-feeding challenges and feeding whilst out in the community. Most mothers needed emotional support and reassurance. Mothers with little or no experience of breast feeding were desperate for someone who understood what it is like to be a breast-feeding mother in a bottle-feeding culture.

I found many mothers also came to me for evidence-based information around breast feeding and for support on continuing breastfeeding following their return to work. I was able to give them information around expressing milk, milk storage and their rights as a breast-feeding woman returning to work. This gave them the confidence to continue their breast-feeding journey for as long as they wanted.

Working in the Weigh and Stay sessions provided an opportunity to normalise breast feeding by making it visible in the wider community and presenting breastfeeding as a realistic and relevant choice for local parents.

I volunteered for around twelve months in Rotherham Children's Centres and realised that this is what I wanted to do as a career. I investigated other volunteering opportunities and started to work for both the Rotherham and Sheffield peer support services. Six months later I was successful in applying for a paid post in Sheffield and have been working as an Infant Feeding Peer Support Worker since September 2019. I get real job satisfaction in my new role, where I continue to develop my breastfeeding support skills and knowledge to help women overcome the many barriers they face. Breastfeeding my baby and then embarking on my volunteering journey has enabled me to change my career and I have enjoyed every part of it."

Breastfeeding (wider picture)

Breastfeeding can reduce the chances of a child becoming obese by up to 25%; breastfed babies have lower rates of: gastroenteritis, respiratory infections, allergies, ear infections and tooth decay.

Overall, the UK's breastfeeding rates are regarded by UNICEF as low compared to other countries, with eight out of ten mothers stopping breastfeeding earlier than they want to, and with as few as 1% of mothers exclusively breastfeeding at six months (as recommended by the WHO)[40]

Breastfeeding rates present an opportunity for Rotherham to enhance the life chances of its new-born population at the first stage of the life course, and to reduce the social gradient in health outcomes.

The WHO recognises that while breastfeeding is a natural act, it is also a learned behaviour. An extensive body of research has demonstrated that mothers and other caregivers require active support for establishing and sustaining appropriate breastfeeding practices"[41]. The House of Commons Health and Social Care Committee[42] also supports this in finding that consistent support provision is a key deciding factor in mothers being able to breastfeed for as long as they wish.

The number of women being supported to continue breastfeeding to the 6 weeks point in Rotherham has increased from 30.4% in 2018/2019 to 32.8% 2019/2020, a rise of 2.4% and well above target. This is the most significant increase in the 6-week breastfeeding rate in recent years and can be attributed to several initiatives across the NHS Trust.

As part of the NHS Long Term Plan[43] Rotherham's maternity services have introduced two midwifery continuity of carer teams, with a third planned for May 2020. There is considerable evidence[44] identifying the benefits of this model of care for mothers and babies that included positive personalised experiences, whilst in terms of clinical experience there was evidence of improved breastfeeding initiation and prevalence[45]. Together with other initiatives, such as The Rotherham NHS Foundation Trust's (TRFT) maternity and neonatal services working towards UNICEF Baby Friendly Initiative accreditation, breastfeeding initiation rates have risen.

Fig 12: Rotherham's Annual Breastfeeding Initiation Rates -TRFT

Year	Breastfeeding initiation
2016-2017	58%
2017-2018	59%
2018-2019	67%
2019-2020	68%

In addition, Rotherham's maternity and 0-19 IPHNS have worked collaboratively to strengthen and widen access to the specialist breastfeeding clinics supporting mothers experiencing complex breastfeeding challenges. Furthermore, Local Maternity Systems (LMS) funding has been secured to sustain and improve the service.

Plans are in place to increase the breastfeeding peer support workers in order to improve the quality of the first breast feed and to get the breastfeeding journey off to a good start. In

addition, paid community breastfeeding support workers are being considered. It is the intention to gain accreditation in the Baby Friendly Initiative within the next 12 – 18 months.

Introducing Solid Foods

The World Health Organisation (WHO) advises the introduction of food other than breast milk from six months of age. Evidence on how to introduce solid foods, such as rate, types of food to introduce, self-feeding versus spoon feeding, is not conclusive. What is clear is that it is a crucial time in a child's early life, marking the beginning of another phase of rapid change, and one that is likely to be associated with the development of food preferences and eating behaviours that might extend into later childhood and even into adolescence and adulthood.

Introducing solid foods is a crucial time in an infant's life, and it can be associated with the development of food preferences, eating behaviours and body weight in childhood and beyond. There is some tentative evidence, for example, that fussy eaters are more likely to be infants who received non-milk foods before the age of four months, but the science and guidance is still developing.

The fact that the science is not settled adds weight to the need for healthcare professionals and others in professional support roles to keep their knowledge up to date, and to keep up our understanding of practices in Rotherham, through good monitoring and recording methods.

The NHS website sets out appropriate advice at https://www.nhs.uk/conditions/pregnancy-and-baby/solid-foods-weaning/

Mental health

As many as one in five women develop a mental health problem during pregnancy or in the first year after their baby is born. Maternal mental health is a major public health issue and one that is now being made a national priority, and specialist perinatal community services are being rolled out across England, including a new service for Rotherham, Doncaster and Sheffield.

Maternal depression is shown to be a risk factor for the emotional and cognitive development of the child[46]. Less attention has been given to the effects on the child arising from maternal anxiety, but a recent systematic review has found that both prenatal and postnatal anxiety can have a small adverse effect on emotional outcomes for the child[47].

Opportunities

Two years is a key age for both the Early Years Foundation Stage and for the Healthy Child Programme. There is an opportunity to improve our understanding of the health and development of the Rotherham population at the end of the 1001 days, and how this information is shared, to enable our frontline professionals to work in the most integrated and family-centred way as possible.

The Ages and Stages Questionnaire (ASQ3) is a key tool used to collect information about our children at the end of the 1001 days. It collects information about levels of development in communication skills, gross motor skills, fine motor skills, problem-solving skills, and personal-social skills. We have an opportunity in Rotherham to improve the recording of this

key measure, and to become better informed as a result about our children's development and respond accordingly.

Recording the weight and percentile position of each child at the two to two-and-a-half-year review would also provide an invaluable benchmark and ongoing piece of information. It may well be that by the time the NCMP programme measures weight, early nutritional programming has already taken place, and it is more difficult to bring about sustainable behaviour change.

Rotherham's low breastfeeding rates are an obvious incentive for change, and a real opportunity to address a key health inequality. The benefits (of breastfeeding) to both child and mother may go beyond nutrition and include attachment, immunity protection and protection from long term conditions and diseases, including some forms of cancer.

Rotherham's Early Help Children's Centres and 0-19 IPHNS represent a key vehicle for addressing inequality, provided they reach those families with the most need and are effective in influencing the home learning environment and the parents' skills for being the primary educators for the period of their child's greatest brain development.

Summary and recommendations

The “First 1001 Days” offer a unique opportunity to influence future health states of the Rotherham population. It is a phase of extremely rapid development, which can set the pattern for the rest of a person’s life, even setting up their likelihood of being predisposed to chronic disease.

Investing at this stage of life should bring huge social benefits and considerable savings in the long term. The effects of any investment may still be apparent in future generations.

The influences on the first 1001 days range from the social, economic and environmental conditions into which people are born, to the lifestyle choices and nurturing and educational styles of parents, and there is a link between all of these.

When considering the first 1001 days inevitably we are discussing a critical point at which two generations intersect, and how the health behaviours of one influence the other. There is growing evidence, however, that the influences from the mother’s own first 1001 days (and indeed the father’s) may be passed on, which offers an opportunity for benefits to be multiplied across generations.

At the life course level, there are distinct phases of development and influence, from conception and pregnancy to new-born life and into infancy and toddlerhood. There are even influences that precede the conception with respect to the preparedness for parenthood with respect to health behaviours and planning for pregnancy.

At the individual level, the lifestyle and health behaviour choices of both parents are important for the health of their child, and both should be supported to make good choices. It is important to avoid the assumption that it is only the mother’s health and lifestyle that is relevant. A father who smokes, for example, increases the risk of adverse health conditions in their children.

The theory of the foetal origin of adult disease largely describes nutrition as the key consideration, and this is reflected in one of the key recommendations of the report. There has been much success in reducing smoking across our population in recent decades, but rates in Rotherham are still comparatively high, and we now know that there can be impacts on the unborn child from maternal smoking (and passive smoking from the father) during pregnancy, so this should be a key focus to give all our children a fair start to life. Once a child is born, brain development is rapid, and in the first two years of life when the parents are the primary educators, there is an opportunity for targeted support from services to improve the skills of the parents, especially those in the most economically disadvantaged circumstances.

Key recommendations

There are many opportunities to influence the conditions that influence the health of the population during this critical life phase, and not all of them are covered in this report. Key pragmatic recommendations are picked out below that cover the key phases of the first 1001 days.

Recommendations

In Rotherham we will develop, jointly with all stakeholders and partners, a clear and ambitious plan to improve support for children, parents and families in the first 1001 days; key actions are outlined below.

Smoking in Pregnancy	- Continue partnership working between Public Health, TRFT, CCG and ICS to reduce the prevalence of women smoking at time of delivery to 16% or less by end of 2022.
Diet and Nutrition	- Develop a local 'Healthy Weight for All' Plan to promote healthy weight and reduce obesity across all ages, by all NHS partners and Council - Adopt the Local Authority Local Authority Declaration on Healthy Weight to create healthy environments for local people.
Physical Activity	- Develop local plan by the Rotherham Activity Partnership (RAP) to encourage the population of Rotherham to be more engaged in physical activity - NHS partners to promote physical activity within clinical services
Breast Feeding	- Increase breastfeeding prevalence at 6-8 weeks, with the continued partnership working with Public Health, TRFT, CCG and ICS outlined in the report and offering the necessary support
ASQ-3	- TRFT to increase the proportion of children aged 2 to 2.5 years receiving ASQ-3 as part of the Healthy Child Programme or integrated review
Air Pollution	- Cross Council working to continue taking actions to address areas of high concentration of NO_2 e.g. through measures to restrict traffic speeds
Get Healthy Rotherham (GHR) Public Health Commissioned Service	- GHR will continue to support the 1001 days agenda - Weight management support offer in partnership with Slimming World - Quit smoking service, for non-pregnant women - Provide brief interventions to individuals identified as having high levels of alcohol consumption

Progress from 2018 Annual Report – Recommendations

Last year's annual report hoped to inspire the people of Rotherham, Councillors, Council colleagues and partner organisations to:

- Consider 'health and wellbeing' in the wider context of being influenced by everything around us.
- Seek first to understand what is 'strong' in our communities and what assets we can build on together to support the health and wellbeing of our residents.

The table below highlights the progress made with the recommendations

What we will do	**Progress**
Lead the development of the re-launch of the Rotherham Joint Strategic Needs Assessment to give clearer insight into the interplay of the factors that influence health and better capturing the assets and strengths of our communities.	The newly refreshed Joint Strategic Needs Assessment website has been shared with partners across the Borough. It is based on the 'influencers on health' model to show the breadth of factors influencing health and to provide a comprehensive coverage of health and wellbeing data. The JSNA is developed and overseen by a multiagency steering group, chaired by a Public Health Consultant. Further work is planned with the voluntary sector to gather more 'community voice' to give context to the data.
All partners should continue to raise awareness of the '5 ways to wellbeing' and the issue of loneliness, such as through collaborative campaigns and Making Every Contact Count training and embedding into contracted service contract delivery. This will include safe talk and mental first aid training for Rotherham staff groups, Councillors and voluntary sector community organisations and targeted suicide prevention training and work in South and Central wards, and a men's mental health football group.	The training to local employers through the BeWell@Work includes the Five Ways to Wellbeing messages. The Five Ways messages have been used by organisations to help people think about their own mental wellbeing and that of others through communications on social media and promotion of different events/activities. They have also been used to help everyone understand how we can work together to address loneliness. The first round of mental health and wellbeing grants to men's groups was launched in 2018. These groups led on work to tackle the issues which can cause men to be at risk of suicide. Many of the groups focused on tackling loneliness and all were encouraged to promote Five Ways to Wellbeing messages. Also, SafeTALK and Mental Health First Aid training has been undertaken. Suicide prevention training was delivered in the central wards to a range of frontline staff and community members. A men's football and mental health group was run by Rotherham Community Sports Trust; this combined football followed by different workshops on mental health topics for men.

Public Health will support a programme of workforce development and training as part of the Thriving Neighbourhoods strategy, to improve skills and understanding around asset-based working.	Thriving Neighbourhoods recruited local sports workers to enhance sports participation in the community. The Joint Strategic Needs Assessment was presented at a Members' seminar which Neighbourhood officers also attended. A wider voluntary sector event also took place in order to promote the use of evidence and intelligence to support a localised approach to asset-based working. Training has been provided by Public Health for the Neighbourhoods team on Mental Health Awareness.
Partners should work together to enable the local community and voluntary sector to support the expansion of the offer of social prescribing as described in the NHS long term plan. This should build on the learning from the newly launched South area multi-agency group work and pilot work on loneliness. The role of voluntary sector organisations such as (REMA and Rotherfed) and Voluntary Action Rotherham and their volunteer centre - https://www.varotherham.org.uk/volunteering/ will be vital in supporting local community organisations and building their capacity and sustaining local based community activity.	Social prescribing is one of the priorities for the Primary Clinical Networks who have overseen the new employment of link workers who are managed by Voluntary Action Rotherham. The link workers are supporting the most vulnerable in Rotherham, and offer a holistic approach to a patient's needs, and when appropriate, signpost to services.
All partners to continue to support the 'Working Win' pilot to support those with mental or physical health conditions to remain in work or gain employment and consider sustainability of this approach.	The Working Win project was supported and promoted by all Rotherham partners. It was led by the Rotherham Local Integration Board. The Local Integration Board coordinated good working practices across all stakeholders. Just over 6,000 people across South Yorkshire were recruited as trial participants enabling the randomised control trial to be of significance. The national evaluation report is awaited which will determine the future of the programme. Sheffield City Region are involved in the continuation of the Working Win model as part of the Local Economic Plan. In Rotherham the people placed in control for the trial were 642 and treatment also 642 (1284 participants in total for Rotherham).
All partners to encourage local workplaces to commit to improving the health and wellbeing of their staff through the Rotherham launch of the South Yorkshire BeWell@Work Award.	In order to support the BeWell@Work scheme, businesses have been offered training in the following areas: - Make Every Contact Count (362) - 5 Ways to Wellbeing (numbers unknown) - Alcohol Awareness (47) - Mental health awareness (50) - Sleep Awareness (10) - Health champion training (74) - Dementia awareness (102) Figures in brackets show how many individuals have undertaken the training within the last 12 months.

	Currently engaged with 32 businesses who are either working towards accreditation or have been accredited in the past year, 15 of these are schools.
Public Health will work with a community arts organisation to create an interactive artwork at the Rotherham Show based on this report, stimulating more people to get involved in thinking about what keeps them healthy, happy and well.	Rotherham Open Arts Renaissance (ROAR) were commissioned to support Public Health in hosting a stall at the Rotherham Show as part of the Diversity Festival. Lots of families and residents came to the stall and discussed the wide range of things they do to keep healthy and considered other ways they could increase the ways they regularly incorporate the 'five ways to wellbeing' into their daily lives. 350 cards were completed and displayed over the weekend to describe some of the activities people do. The insight from this information will be shared through the Joint Strategic Needs Assessment website.

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