

**EXPRESS**

**DIRECTOR OF PUBLIC HEALTH  
ANNUAL REPORT 2016/17**



**FROM THE VERY  
BEGINNING**

*Pregnancy  
and  
Beyond*



# 1 Introduction

What happens during pregnancy and the earliest months after a child is born has a dramatic impact on a child's life and the adult they become. Getting it right at this critical time offers the best chance we have of raising happy and healthy children who reach their full potential, live satisfying lives and contribute positively to their community. Investing in the early years is good for

society, promotes economic growth and reduces demand on health and social care services.

For these reasons this year's Director of Public Health Annual Report highlights the importance of pregnancy and the early years in Buckinghamshire.

## 2 The picture in Buckinghamshire

There are 6,000 babies born every year in Buckinghamshire and about three-quarters of these babies are delivered by Buckinghamshire Healthcare Trust. In Buckinghamshire Healthcare Trust, approximately one in four babies were identified by their mothers as being of non-white ethnicity. For all mothers giving birth in Buckinghamshire, one quarter of mothers were born outside the UK. The most common countries of origin of the mothers were Pakistan, Poland, India and South Africa.

The most common age of mothers in Buckinghamshire in 2015 was 30 to 34 years and the average number of babies born to a woman in Buckinghamshire over her lifetime is just under two per woman.

Teenage conceptions have almost halved over the last 19 years and in 2015 there were 153 deliveries to women estimated to be under 20 years old at the time of conception.

In 2015, 540 babies or 9% of all babies were born to lone mothers in Buckinghamshire. 10.8% of all children under 16 in Buckinghamshire are living in poverty, which is half the national average.

The health of mothers and babies in Buckinghamshire is generally good although the prevalence of low birthweight and prematurity are similar to the national average.

Most common age of mothers in Buckinghamshire

30-34  
years



Average number of babies born to a woman in Buckinghamshire



6,000

babies are born every year in Buckinghamshire



# 3 Low birth weight & prematurity

In Buckinghamshire, 7.5% of all babies (live and stillborn) are low birthweight, which is similar to the national average and has remained unchanged for several years. 7.6% of all live births are preterm.

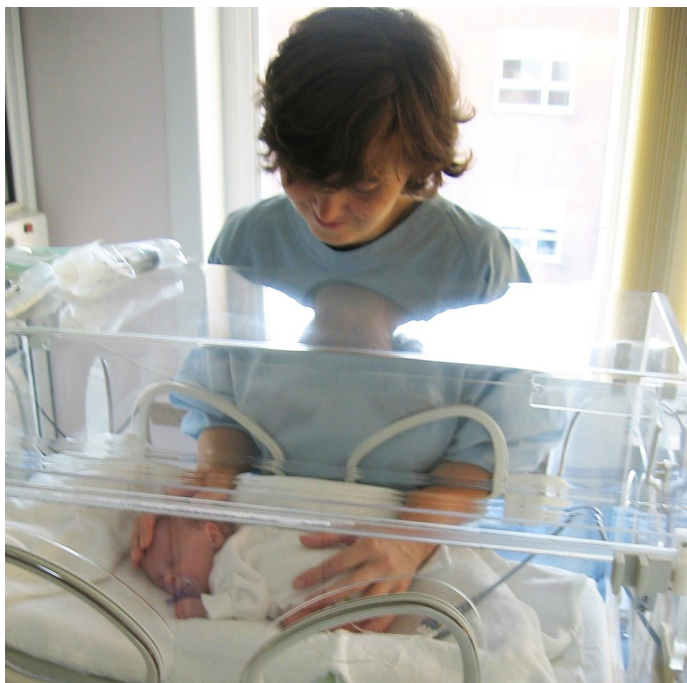
A premature or preterm birth is when a baby is born alive before the 37th week of pregnancy and a low birthweight is below 2.5kg. There is a link between low birthweight and prematurity as premature babies are often low birthweight. Approximately 2% of babies born at term (after 37 weeks of pregnancy) are also low birthweight.

Low birthweight and preterm birth are important indicators of mother and baby's health. Preterm birth before 34 weeks accounts for three quarters of neonatal deaths and half of all long term neurological disability in children. 9.7% of all babies born in the most deprived fifth of the population

in Buckinghamshire are low birthweight, compared with 5.8% in the least deprived fifth.

As the main report highlights, a range of factors contribute to premature delivery or low birthweight babies. Some factors are unknown, but others are known and modifiable or potentially avoidable including maternal smoking or alcohol consumption in pregnancy, drug misuse, domestic violence and maternal stress. Reducing modifiable risk factors, such as smoking in pregnancy, can help to reduce the prevalence of preterm birth and low birth weight.

In other cases there are clinical reasons for premature birth. Mothers at-risk of their babies being born prematurely for clinical reasons can be referred to a specialist prematurity clinic at Buckinghamshire Healthcare Trust.



# 4 The impact of the physical & mental health of the mother

The physical and mental health of the mother before and during pregnancy and after the baby is born is critical to the healthy development of the baby. The health of the father or other primary care giver is important too, but the mother's health has the most direct impact. The social circumstances in which the mother, baby and family live also have a very important influence on the health of the baby and family, both directly and indirectly.

Factors in pregnancy, such as the mother's diet, weight, whether they or other family

members smoke, and whether they drink alcohol or use drugs can affect the development of the baby before birth. For these reasons it is important mothers are as healthy as they can be before they become pregnant to give the baby the best chance of a successful start in life. As many pregnancies are unplanned (estimates range between one in six to one in three) and women may not realise they are pregnant for some months, the ideal is to encourage all women to live as healthy lives as possible, whether or not they are intending to become pregnant.

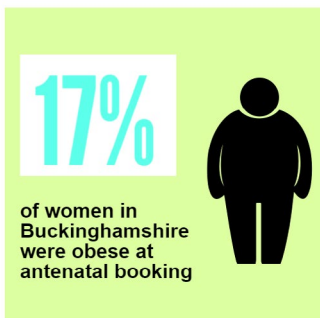
## 4.1 Healthy eating & health weight in pregnancy

Excess weight in pregnancy can result in serious complications during and after pregnancy, including gestational diabetes, miscarriage and stillbirth, pre-eclampsia (a serious condition that threatens the health of mother and baby), blood clots and death. The baby also has an increased risk of overweight or obesity and long-term health conditions as an adult.

To give their baby the best start in life women who are overweight or obese should lose weight before becoming pregnant to ensure they're a healthy weight in pregnancy. Pregnant women should eat a

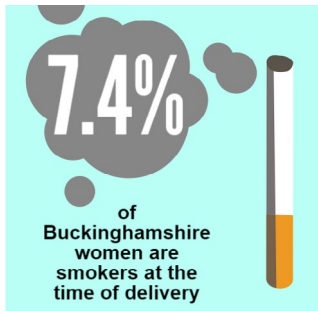
balanced, healthy diet (including vitamin supplements) and remain physically active during pregnancy.

In Buckinghamshire, approximately 55% of women were a healthy weight at antenatal booking, 27% were overweight, and 17% were obese. There are about 1,630 pregnant women who are overweight and 1,110 obese per year. In Buckinghamshire there is an approved weight management programme for pregnant women who are obese and there were 68 referrals to this programme in 2015/16.



## 4.2 Smoking in pregnancy

Smoking in pregnancy has numerous harmful effects including an increased risk of miscarriage, stillbirth and preterm birth. Babies are twice as likely to be low birthweight and are 40% more likely to die before their first birthday if their mothers smoke. Household smoking increases the risk of meningitis, lung infections, asthma and children growing up to be smokers, thus passing the risk on to the next generation.



Women should have a smoke-free pregnancy by stopping smoking before they become pregnant and making sure their partner and other household members stop smoking too. Reducing adolescent smoking is the most effective way of reducing smoking amongst the next generation of parents.

In Buckinghamshire, 7.4% of women (432 women) smoke at time of delivery compared to 11% nationally. Of the 252 pregnant women referred to the smoking cessation service in 2015/16, 95 set a quit date and 42% quit. 32% of pregnant women under 20 years old supported by the Family Nurse partnership smoked at the start of pregnancy. By 36 weeks, 42% had quit and of the remaining women still smoking, two in three had reduced their smoking. There is scope to increase the proportion of women referred to smoking cessation services and setting a quit date.

## 4.3 Alcohol or drugs in pregnancy

Drinking more than one or two units of alcohol per day while pregnant increases the risk of babies being born at a low birthweight or prematurely. Higher levels of drinking, especially 'binge drinking', risk fetal alcohol spectrum disorder (FASD), which is associated with birth defects, poor development, learning difficulties, and poorer educational outcomes, mental health problems and substance misuse later in childhood. Drug misuse in pregnancy is often associated with a chaotic family life and has a direct toxic effect on the unborn baby causing low birthweight, prematurity and in some cases drug dependency in the baby.

The safest approach is not to drink alcohol at all in pregnancy. For people with problematic alcohol use or drug use in pregnancy a well-co-ordinated multi-agency response is required to help reduce risk

to the unborn child and mother. Mothers with alcohol or substance misuse problems may also have mental health problems, be victims of domestic abuse or have other social problems. It is essential that frontline staff enquire about alcohol and drug use and identify co-existing problems to enable effective support and referral.

In Buckinghamshire, an estimated 3,420 women drink more than two units per week in the first three months (trimester) of pregnancy, with about 120 continuing to do so in the second trimester. Less than 2% of women entering drug treatment (less than five women) were pregnant which is similar to the 1% seen nationally. Between 22-25% of people accessing drug treatment services were parents (fathers or mothers) living with their children. A further 30% were parents no longer living with their children.

## 4.4 Maternal and Infant mental health and wellbeing

Although for most women becoming pregnant and having a baby is one of the happiest times of their lives, it can be a really challenging time too due to the psychological, social and physical demands of pregnancy and a new baby. Women are at greater risk of experiencing poor mental health soon after their baby has been born than at any other time in their lives, with a quarter of women experiencing a mental health problem during pregnancy or within the first year after having a baby.

Poor maternal mental health has consequences for mother and baby. Maternal stress in pregnancy can be transmitted to the baby resulting in low birth weight and prematurity. Feeling low in the first weeks after their baby is born, known as 'baby blues', is very common occurring in up to 8 in 10 women. Although it can be distressing, 'baby blues' is usually mild and short-lived. However if these feelings persist, or the mother feels like she is not coping or feeling distant from her baby or worried about any thoughts or feelings then they should always talk to a health professional for further advice and support.

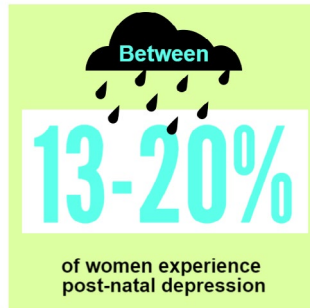
If perinatal mental health problems go untreated they can have a serious impact on women and their families. Poor perinatal mental health can affect the bond between mother and baby, impacting on baby's development and mental health, and the mother's ability to parent their baby. By four years old, children of mothers with prolonged mental health problems are less likely to have good emotional, behavioural and social development leaving them poorly prepared for school. Maternal deaths are very rare, but suicide is the leading cause of

maternal death. Postnatal depression also affects 10% of new fathers.

Anyone can experience perinatal mental health problems, but they are more common in women with a personal or family history of mental illness, women with relationship problems, a lone mother or a mother lacking social support, recent stressful life events, socio-economic disadvantage and teenage mothers.

Early detection and management of mental health problems are effective in reducing symptoms, and good referral pathways can improve identification of problems and access to care.

In Buckinghamshire, 8% of women score above the threshold for moderate depression at the six to eight week post-natal visit. National estimates suggest there would be 600 to 900 women per year experiencing mild to moderate depression or anxiety around the time of pregnancy and 200 women with severe mental illness. There were 600 admissions to hospital for 550 women around the time of pregnancy where there was also a co-occurring mental health problem.



All health and social care professionals should continue to help prevent and identify mental health problems at the earliest stages in pregnancy and after the child is born so that early and effective support can be offered to all families. In recognition of the importance of maternal mental health, Buckinghamshire launched a comprehensive pathway for maternal mental health in 2016.



# 5 Parenting

Sensitive, attuned parenting is one of the most important factors affecting a child's development and wellbeing. Good parenting promotes secure bonds (attachment) between parent and baby. Securely attached children have better physical, mental and emotional health and school achievement.

If children are exposed to stress but don't get the reassurance from parents they need due to unresponsive or inconsistent parenting this can lead to changes in their brain affecting the way they deal with stress in the future. This in turn can lead to lower educational attainment, adoption of risky behaviours, social, emotional and mental health problems.

Parenting can be challenging and may be influenced by parents own adverse childhood experiences, lack of social support, mental health problems, substance misuse or domestic violence. Economic or social issues such as poverty, parental education and knowledge about parenting can also adversely impact on parenting ability.

There are evidence based interventions that have been shown to improve parenting ability and improve attachment, behaviour and cognitive development. Parenting programmes are most effective when they start during pregnancy and the first two years of a baby's life. NICE recommends that all parents should be able to access parenting programmes and that the nature of the mother-baby relationship should be assessed by trained staff after birth and during the early years.

In Buckinghamshire, antenatal classes are offered to all parents by midwives, with health visitor involvement, across the county to help prepare parents for their new role. After the baby has been born health visitors offer parenting advice and support to all new parents and can refer for additional help if necessary. There are also a range of parenting interventions on offer for parents who need more support in Buckinghamshire.



# 6 The impact of social factors on pregnancy and children's health and development

Social factors increasing the risk of poorer outcomes include living in poverty and living in poorer quality housing. Children born to poorer mothers have poorer pregnancy outcomes and are more likely to be born low birthweight, have poorer development and educational attainment and more likely to be in contact with social care. Children living in poorer quality housing are also more likely to have poorer development and health problems.

Due to the challenges of balancing the responsibility of caring for their children with a job, lone parents are more likely to be unemployed, employed part-time or have unstable employment and be in relative poverty compared to two parent families with consequent impact on the mental wellbeing of children.

Teenage mothers and their babies can also face a range of challenges. Teenage mothers can be less likely to finish their education and find a good job and have sufficient income to live on. The babies of teenage mothers can be at risk of poorer health and development. However, in recognition of this, extra support is available for teenage mothers and their babies.

Women from certain ethnic groups tend to be at greater risk of having low birthweight babies, which can impact on the baby's

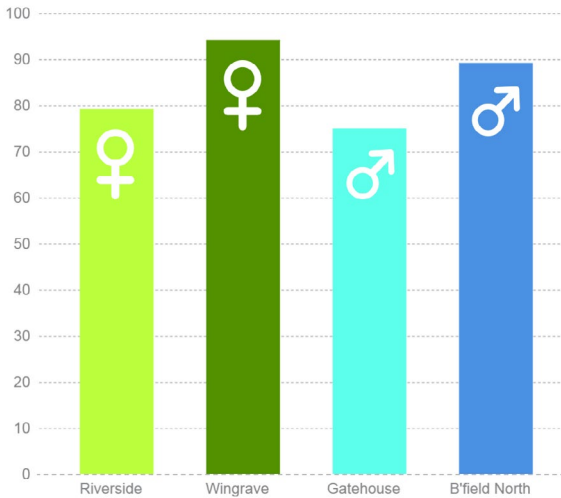
chance of good health. This may be partly due to their social circumstances if they live in less advantaged areas. Recent migrants to the UK who may not understand how the health and social care systems work, and mothers who have difficulty reading and speaking English, are at increased risk of complications during their pregnancy and the birth of their children.

Adverse childhood experiences (ACEs), for example dysfunctional homes, domestic violence, substance abuse or losing a parent increase the risks of poor outcomes throughout life including poor school achievement, substance misuse, mental health problems, unintentional teenage pregnancy, obesity, heart disease, cancer, unemployment, violence and imprisonment. The greater the number of ACEs experienced by a child, the higher the likelihood of poor outcomes.

In Buckinghamshire, about 10,500 children under 16 (10.8%) live in low income families (20% nationally). Health and educational outcomes are worse for children living in the more deprived areas in Buckinghamshire. Babies born in the most deprived fifth of the population are more likely to be born low birthweight and die in the first year of life and have poorer development by reception year at school than the Buckinghamshire average.







The gap in life expectancy for people living in the most deprived fifth of Buckinghamshire compared to the least deprived fifth is 5.4 years. This difference is even more marked at ward level. A baby girl born in Riverside has a life expectancy of 79.2 years, while a baby girl born in Wingrave has a life expectancy of 94.2 years. A baby boy born in Gatehouse has a life expectancy of 75.0 years, while a baby boy born in Beaconsfield North has a life expectancy of 89.2 years.

## 6.1 Domestic abuse

Domestic abuse can happen to anyone and anyone can commit abuse. It can happen to women and men, in same-sex and heterosexual couples, and among all occupational groups. Domestic abuse involves any incident of controlling, coercive or threatening behaviour, not just violence or abuse between partners. Domestic abuse often starts or escalates during pregnancy. Nationally, one in every four women will experience domestic abuse in their lifetime. In Buckinghamshire from October 2015 to 2016, there were 8,923 reported incidents of domestic abuse.

The impact of domestic abuse in pregnancy is far reaching. It can result in a wide range of impacts on mother and baby including miscarriage, preterm labour, low birthweight, and long lasting physical disability. The impact on the mother includes physical harm, depression, anxiety and post-traumatic stress disorder. Women who have experienced domestic abuse are 15 times

more likely to misuse alcohol, nine times more likely to misuse drugs, and five times more likely to attempt suicide. As well as the physical and psychological effects, a woman experiencing domestic abuse may find it difficult to attend her antenatal care appointments, making it even harder to identify the abuse and offer help.

The stress experienced by a woman experiencing domestic abuse may have harmful effects on the unborn child and children experiencing domestic abuse grow up with a range of problems from difficulty sleeping and temper tantrums in younger children to behavioural problems, substance misuse, eating disorders or self-harm in older children. Early identification of women at risk by asking all pregnant women in a safe, confidential environment about domestic abuse, and intervening early can help protect mother and baby, support the mother child relationship, and improve their health and wellbeing.

## 6.2 Access to services

A range of services have a vital role to play in helping women have a healthy pregnancy and healthy baby, ranging from services that help women stay healthy before they become pregnant to sexual health and contraception services that support good sexual health and the ability to plan pregnancies and avoid unintended pregnancy. A short inter-pregnancy interval of less than 12 months increases the risk of complications including preterm birth, low birthweight, stillbirth and death highlighting the importance of good contraception.

Unplanned conceptions can be reduced through better relationship and sex education in schools before children are sexually active, the promotion of emotional resilience in children and adults and the provision of long acting contraception and good family planning.

Women book into antenatal care at the start of their pregnancy and first see the midwife between nine to 12 weeks into pregnancy. This enables early identification and appropriate response to any factors that may impact on pregnancy and wellbeing and opportunity to screen for a variety of conditions before 21 weeks of pregnancy.

In Buckinghamshire, 14% of women book into antenatal care after 13 weeks at Buckinghamshire Healthcare Trust thus reducing the opportunities for early advice and support at this critical time.

The [Healthy Child Programme](#) is the core universal public health service for children and families. The programme comprises health promotion, child health surveillance and screening including immunisations, health and development reviews and advice and support to parents. It is led by health visitors in collaboration with other professionals.

The health visiting service in Buckinghamshire offers a series of mandated visits to babies and their families within two weeks of birth, at six to eight weeks post-birth, at one year and two and a half years for the 32,000 children under five years old living in the county. Health visitors ensure that babies, young children and their families receive early help and support to stop problems developing and to build firm foundations that maximise the chances of experiencing good health and wellbeing throughout life.



# 7 Summary and recommendations

Buckinghamshire County Council, the District Councils and NHS organisations in Buckinghamshire are all members of the Buckinghamshire Health and Wellbeing Board and are committed to giving every child in Buckinghamshire the best start in life, as set out in Buckinghamshire Joint Health and Wellbeing Strategy. In order to do this we need to work together with individuals, communities and partners to improve outcomes for babies, their mothers and families. The role of health services is clear in this report, but success depends on the contribution of all partners beyond the NHS. Whether we have a role in ensuring that people are living in good quality housing, or that the environments we live in support healthy lifestyles, or children's

education helps them make the right choices or making sure all our frontline staff are trained to recognise signs of mental health problems and respond appropriately, we can all make a vital contribution.

There is a role of course for individuals and we need to ensure that people are provided with the right information, skills and support to make the best choices and look after their health and that of their baby. The choices people make and their ability to give children the best start in life also depend on their social context. We need to be aware of this and ensure that in improving outcomes for our babies and the future generation of Buckinghamshire residents that no babies and families get left behind.



# Recommendations

- 1** Healthcare professionals in contact with pregnant women or new mothers should assess all the factors that could impact on the mother's, baby's and family's health and offer advice, support and referral to appropriate services. This includes lifestyle factors such as smoking, alcohol consumption, drug use, weight and healthy eating as well as mental health, exposure to domestic violence and other social factors. There is significant scope to increase referrals to support services to improve outcomes for babies, mothers and families.
- 2** Buckinghamshire County Council and partners should consider whether there is a need to develop and implement a new comprehensive strategy to support parents in Buckinghamshire.
- 3** All professionals in contact with pregnant women and families with young children should encourage parents to access universal parenting advice via the red book, [national start4life website](#), [baby buddy app](#) and the [Buckinghamshire Family Information Service](#).
- 4** Commissioners and providers of maternity, early years, mental health and substance misuse services should enhance the data collected on the physical and mental health of mothers and babies, the prevalence of risk factors and referral to and outcomes of services. This should enable us to monitor progress and evaluate the impact of our services. Key data should be reported annually to the Health and Wellbeing Board.
- 5** Buckinghamshire County Council should work closely with schools to explore how the new compulsory PSHE can prepare young people for a healthy and happy life and addresses emotional resilience, healthy relationships, sexual health and healthy lifestyles. One of the future benefits of this should be healthier parents and babies and healthy, planned pregnancies.
- 6** Partners should consider how they can contribute to improving outcomes for babies, mothers and families in Buckinghamshire.

For the contact details of all services included in this report please visit the public health webpages at <http://www.healthandwellbeingbucks.org/public-health>.