Maternal Health and Perinatal Mental Health

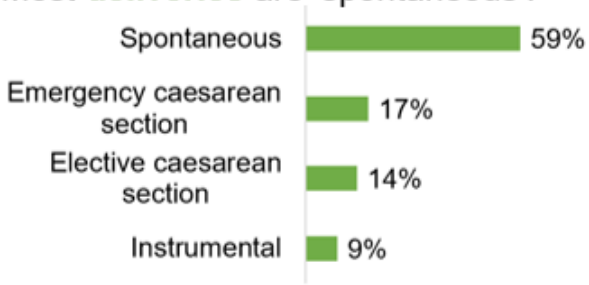
Introduction

Motherhood is usually a positive and fulfilling experience, but it can be associated with ill-health and poor mental wellbeing. Helping women to improve their health and reduce risks before, during and after pregnancy will help to ensure that they have healthier pregnancies, and that their babies have the best start in life. Pregnant women should receive regular check-ups and information, vaccination, and advice about the impact of smoking, drinking and healthy weight. Here 'maternal health' refers to the health of women during pregnancy, childbirth and the postpartum period.

Headlines

babies are born in Norfolk each year
(and this is not predicted to change)
Source: ONS Birth Data

Most **deliveries** are 'spontaneous':



The rate of elective caesarean increases with age group of the mother.
Source: Maternity Services Data Set

Early maternal care supports good maternal health:

90% are seen before

Source: Maternity Services Data Set

Nationally, less than half of women start pregnancy a **healthy weight**

46%

Source: Maternity Services Data Set

49% Last winter in Norfolk half of pregnant women had a **flu jab**.

Source: PHE Seasonal Flu Vaccine data

Some areas of Norfolk have a significantly high rate of **smoking in pregnancy**

Overall in Norfolk 13.4% of women smoked at time of delivery – **over 1,000 women** in 2018/19.

Source: Maternity Services Data Set

An estimated **3%** experience **severe mental health** needs **10-30%** experience **mild to moderate** mental health needs.

Influences on Health and Wellbeing

A women's lifestyle choices take on particular importance during pregnancy and motherhood. Of the 60% of women for whom **alcohol** use at time of booking was recorded 3% reported drinking in pregnancy.[1] Drinking alcohol is harmful to the unborn child and can in extreme cases cause foetal alcohol spectrum disorder (FASD). This condition is estimated to affect 1% of births,[2] if 9,100 children are born each year in Norfolk, we can estimate that around 90 children each year will have FASD.[3]

Smoking in pregnancy has well known detrimental effects for the growth and development of the baby and health of the mother. Smoking increases the risk of complications during labour, miscarriage, premature birth, stillbirth, low birth-weight and sudden unexpected death in infancy, it is also linked to asthma in children. More women are still smoking during pregnancy in Norfolk than is seen on average. The trend for Norfolk has fluctuated over recent years and has not followed the national trend of reducing. 13.4% in Norfolk (1,066 mothers) smoked at time of delivery in 2018/19), compared to 10.6% of mothers in England (see Figure 1).[4]

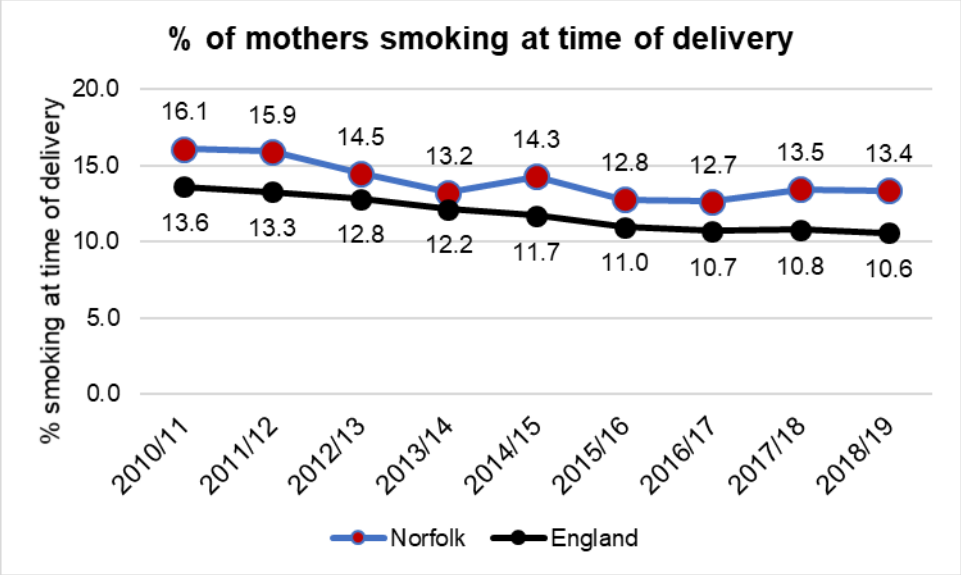


Figure 1: Smoking status at time of deliver (Calculated by PHE from the NHS Digital return on Smoking status At Time of delivery (SATOD))

Maternal **obesity** increases health risks for both the mother and child during and after pregnancy, and obese women are at greater risk of miscarriage, gestational diabetes, cardiac disease, pre-eclampsia and haemorrhage. Women who are obese are significantly more likely to be older in pregnancy, to have a higher parity (number of pregnancies), and live in areas of high deprivation, compared with women who are not obese.[5] Nationally less than half of women start pregnancy a healthy weight (46%), with 3% underweight, 28% overweight and 22% obese.[6]

Perinatal **mental illness** encompasses a range of mental health conditions that mothers may experience during pregnancy or in the first year after the birth of their child. Illnesses include antenatal and postnatal depression, maternal obsessive-compulsive disorder, anxiety and psychotic disorders. As many as one in five women develop a mental health problem during pregnancy or in the first year after the birth of their baby.[7]

[1] NHS Digital. NHS Maternity Statistics 2018-19. https://files.digital.nhs.uk/D0/C26F84/hosp-epis-stat-mat-summary-report-2018-19.pdf)
[2] Larcher, V. and Brierley, J. Fetal alcohol syndrome (FAS) and fetal alcohol spectrum disorder (FASD)—diagnosis and moral policing; an ethical dilemma for paediatricians" Achieves of Diseases in Childhood.
[3] Maternity Services Dataset (MSDS). April to October 2019. https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-sets/maternity-services-data-set/maternity-services-dashboard
[4] Public Health England (2019) Percentage of women who smoke at time of delivery https://fingertips.phe.org.uk/profile/cyphof/data#page/4/gid/8000025/pat/6/par/E12000006/ati/102/are/E10000020/iid/20301/age/1/sex/2
[5] Public Health England National Obesity Observatory (2005) Maternal Obesity http://www.noo.org.uk/NOO_about_obesity/maternal_obesity/maternalhealth
[6] NHS Digital. NHS Maternity Statistics, England 2018-19, 2019
[7] RCOG (2017) Maternal Mental Health – Women's Voices https://www.rcog.org.uk/globalassets/documents/patients/information/maternalmental-healthwomens-voices.pdf

NICE estimate 3% of mothers will experience severe mental health needs (around 300 women each year in Norfolk) and 10-30% with have mild to moderate mental health needs (2,600 – 4,500 women). See Table 1 for more detailed estimates:

Condition	Lower est.	Upper est.	Estimated number in Norfolk	
Postpartum Psychosis	0.2%		20	
Chronic serious mental illness	0.2%		20	
Severe depressive illness	3%		265	
Mild to moderate depressive illness and anxiety states	10%	15%	875	1,310
Post-traumatic stress disorder	3%		265	
Adjustment disorders and distress	15%	30%	1,310	2,620

Table 1: Estimates of perinatal mental health conditions applied to the Norfolk Population. Source: Public Health England, Child and Maternity Health Intelligence Network[8]

A recent audit across the maternity units in the three Norfolk hospitals showed that 71% of women identified as requiring a psychological intervention are seen within four weeks.[9]

Experiencing mental health problems can make adjustment to motherhood and caring for new and existing children more difficult and can impact on the quality of parenting and mother-infant bond, and adversely affect a child's cognitive, emotional and behavioural development. Untreated perinatal mental health problems can have a devastating impact on mothers, fathers, partners and families. These conditions may be experienced for the first time in pregnancy or can be to a recurrence of existing conditions. Research from "Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK" (MBRRACE-UK) highlights that maternal suicide is the second largest cause of direct maternal deaths occurring within 42 days of the end of pregnancy.[10]

Pregnant women have a compromised immune system and are therefore more susceptible to developing common illnesses, such as **influenza**. There is good evidence that pregnant women have a higher chance of developing complications if they get flu, particularly in the later stages of pregnancy. They are therefore considered a high-risk group and eligible for free seasonal flu vaccination though GP, pharmacies and midwifery services if they are pregnant during the winter months. Last winter (2018/19) 49% of pregnant women in Norfolk received their seasonal flu vaccination, which is slightly better than the national average of 45%.[11]

The chances of a woman **dying** in and around childbirth in the UK are very small – less than 1 in every 10,000 women giving birth. Maternal deaths from direct causes - that is complications from the pregnancy itself such as bleeding, blood clots, pre-eclampsia or infection - continue to decrease. However, maternal deaths from indirect causes; pre-existing conditions that are not direct pregnancy complications, such as heart disease, epilepsy, mental health problems or cancer, remain a challenge in the UK.[12]

Engaging with fathers regardless of age and social circumstances increases the likelihood of positive changes to lifestyle and subsequently the health and wellbeing of mother, baby and the father himself.[13]

Social, environmental, population context

More babies are born in deprived areas of Norfolk than in more affluent areas (see figure 2). Poverty is associated with a higher risk of illness and premature death. More children in deprived areas are born with a

[8] Source of deliveries: Hospital Episode Statistics, Health and Social Care Information Centre.
Source of rates of disorders: Joint Commissioning Panel for Mental Health. Guidance for commissioners of perinatal mental health services. Volume two: practical mental health commissioning. London: Joint Commissioning Panel for Mental Health; 2012. Available from: www.jcpmh.info/resource/guidance-perinatal-mental-health-services/
[9] Norfolk Local Maternity Services (LMS) Audit Report 2018.
[10] "Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK" (MBRRACE-UK) (2019) https://www.npeu.ox.ac.uk/mbrrace-uk/reports
[11] Public Health England (2018/19) Seasonal influenza vaccine uptake amongst GP Patients in England. https://www.gov.uk/government/statistics/seasonal-flu-vaccine-uptake-in-gp-patients-winter-2018-to-2019
[12] MBRACE-UK (2015) Confidential Enquiry into Maternal Death 2015 https://www.npeu.ox.ac.uk/mbrrace-uk/reports
[13] Bottorff, 2006; Flouri & Buchanan A. 2003

low birth weight, they are more likely to experience poor housing, higher rates of chronic illness (such as asthma) and poor diet and nutrition.[14] All of which contribute to people in the most deprived areas having a life expectancy that is six years lower for men and three years lower for women than the most affluent groups in Norfolk.

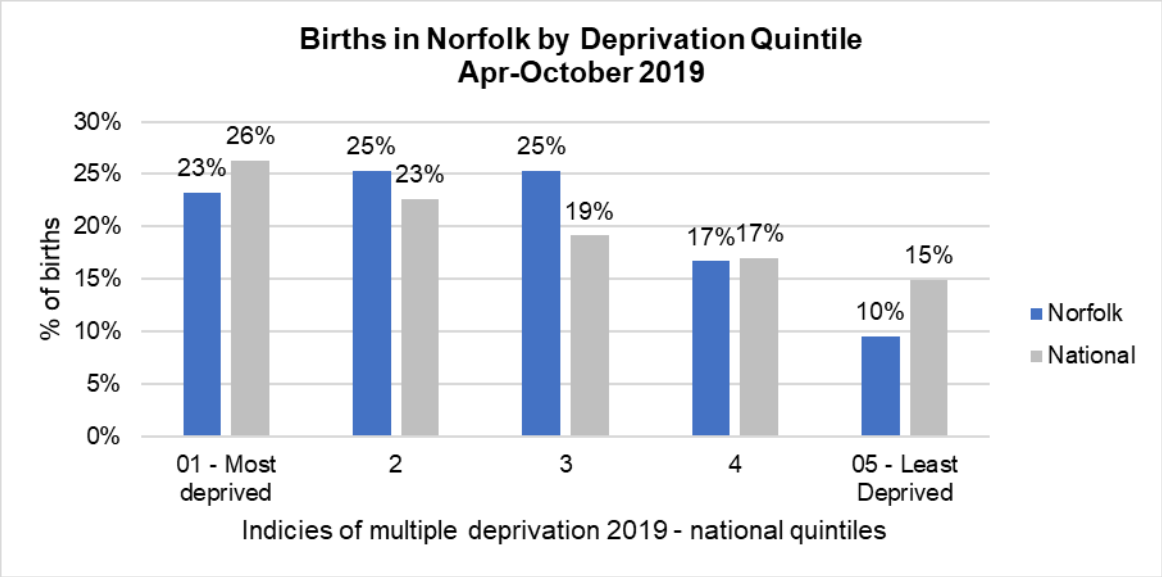


Figure 2: Proportion of births in that were born in each of the deprivation categories (IMD2019 National Deprivation Quintiles) based on the home address of the mother. Source: Maternity Services Dataset (MSDS). April to October 2019.

Mothers in the lower and upper age bands are at greater risk of poor health for themselves and their babies. Teenage mothers are at increased risk as they often present at maternity for services later in their pregnancy, and due to the mother's lifestyle and diet; last year 4.8% of Norfolk mothers were under the age of 20, slightly higher than the national average of 3.6%.[15] Older mothers present a series of different challenges; they have a greater chance of developing medical disorders such as diabetes, high blood pressure or other chronic diseases. The likelihood of stillbirths and multiple births also increases with the mother's age.[16] Norfolk has fewer births to mothers aged over 35 than is seen nationally – 18% compared to 22%,[17] meaning that more women in Norfolk give birth during the “lower-risk” ages of 20-35.

Pregnancy is a unique opportunity to identify health needs with a potential long-term impact. Women from BAME groups are more likely to book late and are less likely to access antenatal care and take folic acid prior to pregnancy.[18] In addition, they are thought to have less access to high-quality perinatal education and support.[19]

Current services, local plans and strategies

The Norfolk & Waveney Local Maternity System (LMS) oversees service transformation at a local level by brings together providers and commissioners of maternity services to plan the design and delivery of services. The Maternity Transformation Programme supports local Sustainability and Transformation Partnership (STP) processes and seeks to achieve the vision set out in the 2016 report on National Maternity Review, ‘Better Births’. The work streams cover three key areas: local drivers for change, service improvement and system enablers.[20]

All mothers are cared for by a community Midwife, accessed through their GP Surgery and then transferred to a Health Visitor when the baby is born. Families in Norfolk have several options of where to deliver their baby,

[14] Child Poverty Action Group: The impact of child poverty http://cpag.org.uk/content/impact-poverty
[15] Maternity Services Dataset (MSDS). April to October 2019. https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-sets/maternity-services-data-set/maternity-services-dashboard
[16] ChiMat Maternity Service Snapshot http://atlas.chimat.org.uk/IAS/profiles/profile?profileId=10&geoTypeId=
[17] Maternity Services Dataset (MSDS). April to October 2019. https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-sets/maternity-services-data-set/maternity-services-dashboard
[18] Public Health England. *Guidance: Health Matters: Reproductive Health and Pregnancy Planning*. L; 2018. https://www.gov.uk/government/publications/health-matters-reproductive-health-and-pregnancy-planning/health-matters-reproductive-health-and-pregnancy-planning .
[19] Redshaw M, Henderson J. Sociodemographic differences in women’s experience of early labour care: a mixed methods study. *BMJ Open*. 2017;7:e016351. doi:doi:10.1136/ bmjopen-2017-016351
[20] NHS England Maternity Transformation Programme https://www.england.nhs.uk/mat-transformation/

including home birth or delivery at an acute hospital (Queen Elizabeth Hospital in King's Lynn, Norfolk and Norwich University Hospital in Norwich and James Paget University Hospital in Gorleston) either in the labour wards or in the midwifery led birthing units available at each hospital.

The Norfolk Healthy Child Programme supports parents from conception. Health Visitors make antenatal contacts with all mothers, and there are specialist 'teen parent pathway' and the Family Nurse Partnership scheme for vulnerable teen parents. The "Pathway to Parenting" (P2P) course for new parents delivered via the Just One Norfolk website (https://www.justonenorfolk.nhs.uk/). This offers advice, support and practical skills, and ways to contact the Healthy Child Programme for people who require further support.[21] Private options are also available such as National Childbirth Trust (NCT).

Norfolk has a specialist perinatal mental health service that provides care and treatment to women who are pregnant or are up to one year postnatal and are at risk of, or are affected by, mental illness. They also offer expert advice to women considering pregnancy, if they are at risk of a serious mental illness. The service also includes mother and baby unit for complex or severe mental health illness during the last trimester of pregnancy and up to a year after birth. The unit enables women to receive inpatient care while remaining with their baby. In addition 'Get Me Out The Four Walls' is a registered maternal mental health charity based in East Anglia that offers informal social meets around the county for mothers, fathers and carers to attend. There is also a dedicated fund to provide private psychological therapy to women most in need.[22]

The Norfolk & Waveney Healthy Pregnancy Plan supports the Local Maternity System. It puts plans in place to support children to have the best start in life by focusing on a preventative approach to tackle causes of poor health outcomes in mothers and babies. The plan recognises the wider determinants of health and advocates a system wide approach in order to reduce health inequalities. The priorities for Norfolk include supporting both pregnant women and their partners/families by:

- Promoting smoke free, alcohol and drug free, healthy weight in pregnancy.
- Preventing domestic abuse, drug and alcohol misuse and poor mental wellbeing
- Supporting immunisation and screening, smoking cessation, pregnancy planning and breastfeeding

Public Health England are developing six 'High Impact Areas' for maternity. They are:

- Improve planning and preparation for pregnancy (preconception including: consanguinity and cervical screening, planned pregnancy by choice);
- Support women to entering pregnancy a healthy weight;
- Support women in having a smokefree pregnancy;
- Reduce the incidence of harms caused by alcohol in pregnancy;
- Reduce the inequality of outcome for women from BAME communities and their babies;
- Support parent mental health

Women who are pregnant, or planning to become pregnant, should be encouraged to stop smoking, maintain a healthy weight and get appropriate vaccinations. Encouraging these lifestyle changes for both the women and their partners and families at a crucial turning point in their lives may encourage them to adopt these habits for good and pass on healthy behaviours to their children.

Voice – the perspective from the public, service users, referrers and front line staff

In 2015 Norfolk Healthwatch carried out a project to review maternity services in Norfolk and make recommendations for commissioners. They visited maternity services and interviewed service users and staff. Generally that found good satisfaction with maternity services and made some specific recommendations in relation to ensuring equity of access to antenatal classes and ensuring provision of information for women who do not speak English as their first language.[23]

All maternity services (like other health services) are required to ask users whether they would recommend the service to their friends and family (knows as the 'Friends and Family Test'). The results for Norfolk hospital are

[21] https://www.justonenorfolk.nhs.uk/our-services/pathway-to-parenting-p2p
[22] https://www.getmeout.org.uk/
[23] Revill, S. on behalf of Healthwatch Norfolk (2015) Maternity Services in Norfolk http://www.healthwatchnorfolk.co.uk/wp-content/uploads/2015/11/15-07-Maternity-Services-in-Norfolk.pdf

shown in Table 2. In general, 96% of people are satisfied with the services they receive and would recommend them.

	James Paget University Hospital	Norfolk and Norwich University Hospital	Queen Elizabeth Hospital
Antenatal Care	94%	95%	98%
Birth Setting	95%	94%	97%
Postnatal Ward	95%	98%	98%
Postnatal Community	95%	*	99%
Total	**96%**	**97%**	**96%**
N = (Number of respondents)	308	701	837

Table 2: Percentage of respondents who are likely or extremely likely to recommend maternity services (July – December 2019)
* Data supressed due to low response rate (only 3 respondents).

Maternity Voices Partnerships are made up of women and their families, commissioners and providers (midwives and doctors) working together to review and contribute to the development of local maternity care. There are three groups across Norfolk, one attached to each acute trust, which feed into the Local Maternity System (LMS).

References and information

Other relevant JSNA briefings – Low birth Weight, Teenage Pregnancy, breastfeeding, parental substance misuse.
http://www.norfolkinsight.org.uk/jsna/document-library/briefing-papers/

Healthwatch Maternity Services in Norfolk
http://www.healthwatchnorfolk.co.uk/wp-content/uploads/2015/11/15-07-Maternity-Services-in-Norfolk.pdf

NHS England (2016) National Maternity Review Report.
https://www.england.nhs.uk/ourwork/futurenhs/mat-transformation/mat-review/

Author and key contacts

Claire Gummerson, Public Health Information Officer, Norfolk County Council
Claire.gummerson@norfolk.gov.uk

Online feedback:
Send us your query or feedback online using our online feedback form at
http://www.norfolkinsight.org.uk/feedback

Email: JSNA@norfolk.gov.uk

Publication date

June 2020