

Maternal health in pregnancy: Factsheet

Tower Hamlets Joint Strategic Needs Assessment 2011-2012

Executive Summary

This fact sheet looks at the health of women during pregnancy, childbirth and the postpartum period together with the impact on the fetus and newborn child. Pregnancy and childbirth are normal human conditions but can present risks for the health and wellbeing of the pregnant woman, fetus and newborn child. The health of the woman during pregnancy can also have a lifelong impact on the health and wellbeing of her child.

Some of the key factors impacting on maternal health are as follows.

Social factors, including:

- Poverty, deprivation, overcrowded housing and homelessness
- Birth outside marriage /sole registration
- Maternal age (under 20 years and 35 years +)
- Domestic violence, including female genital mutilation (FGM)
- Recent migration (including asylum seekers and refugees)
- Low literacy and difficulties in speaking or reading English

Behavioural risk factors, including:

- Smoking during and after pregnancy
- Alcohol and substance misuse
- Nutrition, physical activity and body weight

Pre-existing and pregnancy related maternal morbidity, including:

- Diabetes,
- High blood pressure
- Mental illness
- Infectious diseases

Timely access to high quality, patient centred antenatal care

In Tower Hamlets high levels of poverty and deprivation contribute increased risks for women during pregnancy and there is a high proportion of pregnant women with complex needs for example diabetes.

The prevalence of type 2 diabetes in pregnant women in Tower Hamlets is substantially higher than the average for England and Wales, 5% (2007) which can be explained largely by our local demography.

Maternal obesity (defined as obesity during pregnancy) increases health risks for both the mother and child during and after pregnancy. Statistics on the prevalence of maternal obesity are not collected routinely in the UK, but trend data from the Health Survey for England show that the prevalence of obesity among women of childbearing age increased during the period 1997-2010. Limited local data is currently available.

The proportion of women who smoke and/or drink alcohol during pregnancy is lower than average for London and England, which again reflects our local demography, but there are sub groups who are at increased risk, for example white women.

There is local evidence that a high proportion of pregnant women are deficient in Vitamin D. Data collected retrospectively¹ from 497 pregnant women booking during August 2009 and February 2010 found 74% to be deficient.

Clinical outcomes of pregnancy are generally good but there is a high proportion of low birth weight babies. This is associated with the high proportion of births to Bangladeshi women, their small maternal body size and potentially poor nutrition.

The standardised mortality ratio for maternal mortality, pooled for 2008-2010, is slightly higher than that for England but is substantially below that for London

Key evidence based interventions to promote maternal health and good outcomes of pregnancy include:

Addressing social factors

- Improving educational attainment and access to employment and income for disadvantaged groups, particularly women
- Ensuring adequate housing for vulnerable pregnant women, including teenagers
- Identification and support for women experiencing domestic violence, including FGM

Maternal health promotion

- Health education for young people and women of child bearing age including: sex and relationships education, awareness of factors affecting maternal health and outcome of pregnancy and understanding of how to access antenatal services
- Reduce the number of unplanned teenage conceptions
- Access to preconception information and care e.g. preconceptual intake of folic acid
- Support for smoking cessation during pregnancy
- Promoting healthy weight during and after pregnancy

Improving access to high quality, patient centered care

- Early access to maternal care i.e. booking by 12+6 weeks

¹ Results of antenatal vitamin D screening at Barts and the Royal London NHS Trust, April 2010

- Woman-centred care and informed decision making , including access to antenatal classes
- Access to specialist care for high risk women, e.g. those with mental health problems, alcohol and substance misuse, teenage mothers, vulnerable first time mothers
- Advocacy and translation services for women who have difficulties with reading or speaking English
- Identification and control of existing and pregnancy associated clinical conditions e.g.mental illness, diabetes and hypertension
- Informed access to antenatal screening for fetal anomalies, sickle cell and thalassaemia and infectious diseases
- Access to home births or midwife led birthing centres for low risk women
- Reduce number and percentage of xxx C-sections
- Infection control

Key NICE guidelines and national policy documents are listed in appendix 1

There have been significant improvements in maternal health and associated factors in Tower Hamlets for example:

- A 45% reduction in teenage pregnancy since 1998, compared with a national decrease of 24% and a London decrease of 27.4%;
- Reduction in births to women under 18 years from 8.6 to 4.9 (per 1000), and to women under 20 years from 22 to 11.8 (per 1000)²;
- Increase in the proportion of pregnant women booking for antenatal care by 12 weeks and 6 days from 68.3% (2008/9) to 95.5% (2011/12);
- Increase in the number of mothers attending antenatal parenting classes from 724 (2008/09) to 1609 (2011/12). Increase in partners attending from 490 (2008/09) to 1421 (2011/12)³;
- Reduction in the proportion of women smoking during pregnancy (assessed at delivery) from 6.6% (Q1 2009/10)⁴ to 4.0% (Q2 2011/12);
- Improvements in patient experience

Areas of continuing concern include:

- More needs to be done to ensure that domestic violence and FGM are detected early with appropriate support provided
- Better data needed on uptake and outcomes of the perinatal mental health service
- Improved data on uptake and coverage of antenatal screening

Recommendations

Data

- Improving the data by ensuring providers deliver information specified in contracts
- Improving the incompatible IT systems operating across the statutory sector

² ONS

³ Audit data

⁴ Source: The Health and Social Care Information Centre, Lifestyle Statistics / Omnibus

- Develop an accurate picture of prevalence and demography of the local women for modifiable risk factors e.g. early maternity access, smoking during pregnancy, breastfeeding, domestic violence
- Determine the local prevalence of post-natal depression
- Explore possibility an FGM audit with midwives across sites via a screen on the maternity system e.g. question at booking and then review at birth to assist in determining local prevalence
- Midwives to monitor the provision of Healthy Start vitamins to pregnant women

Other

- To build a communication strategy to inform women and their families how to access antenatal care; further work is required to increase access by the most vulnerable groups
- Facilitating the choice of the place of birth, including home births, and postnatal care
- Providing each woman with the support of a midwife she knows and trusts through pregnancy to postnatal care.
- Continuation of the Maternity Mates Doula programme to provide peer support for vulnerable women during pregnancy and in the first 6 weeks post birth
- Ensure that the most vulnerable young mothers have access to support from the Family Nurse Partnership by improving timeliness of referral and links to other services
- Secure funding for an effective Smoke Free Homes and cars programme in Tower Hamlets
- Work with partners to include maternity as part of partnership mental health and wellbeing strategy, and partnership substance misuse strategy action plan.
- Review and strengthen the ante and post natal depression pathway, raising awareness of the importance and links to safeguarding
- Review care pathway and raise awareness of Lead Consultant and midwives re: FGM and use of specialist service
- Maternity services teaching sessions to include detection and management of FGM
- Community engagement to encourage women to disclose if have FGM
- FGM to be documented as risk factor
- Explore offering external genital examination antenatally in high-risk groups
- Promote preconception uptake of folic acid and Healthy Start vitamins through Children's Centres
- Promote the uptake of Healthy Start vitamins for pregnant women at the antenatal booking appointment and subsequent review appointments
- Implementation of recommendations from the maternal obesity audit.
- Input into High BMI antenatal classes
- Improve referrals to antenatal and postnatal weight management service.
- Child weight management service to develop a postnatal buddy/peer Support for exit strategy after the group finishes

1. Maternal health: What are the issues?

See also separate fact sheets on: smoking and pregnancy; maternal, infant and early years nutrition; diabetes in pregnancy, domestic violence, alcohol and substances misuse; teenage pregnancy; safeguarding children; immunization, ⁵maternal obesity and ⁵female genital mutilation for more detail on these areas

This fact sheet looks at the health of women during pregnancy, childbirth and the postpartum period together with the impact on the fetus and newborn child.

Pregnancy and childbirth are normal human conditions but can present risks for the health and wellbeing of the pregnant woman, fetus and newborn child. The health of the woman during pregnancy can also have a life long impact on the health and wellbeing of her child.

The Marmot Strategic Review of Health Inequalities⁶ highlighted that the foundations for virtually every aspect of human development; physical, intellectual and emotional; are laid down in early childhood, starting in the womb, with lifelong effects on many aspects of health and wellbeing. Pregnancy is also a time when prospective parents are often more willing to make behaviour changes to promote the health and wellbeing of their developing baby.

There is evidence that social factors, behavioural risk factors, pre-existing and pregnancy related clinical conditions and timely access to high quality antenatal care can all impact on maternal health, the outcome of the pregnancy and the child's longer term health and wellbeing.

Social factors

The Confidential Enquiry into Maternal and Child Health⁷ showed that women living in families where both partners were unemployed, many of whom have features of social exclusion, were up to 20 times more likely to die from a pregnancy related complications than women from the more advantaged groups; single mothers were three times more likely to die than those in stable relationships and women living in the most deprived areas of England had a 45% higher death rate compared to women living in more affluent areas.⁸

Maternal age is an important influence on maternal health with young mothers (under 20 years) being at higher risk of poor health outcomes, poor emotional health and disadvantaged economic well-being and older mothers (over 35 years) also being at higher risk of complications for both mother and child including high blood pressure, miscarriage, complications during delivery and of having a child with a congenital abnormality such as Down's syndrome⁹. The increase in assisted reproduction also increases risks of multiple pregnancies with attendant risks to mother and child.

⁵ * in progress

⁶ Fair Society, Healthy Lives: The Marmot Review, Strategic Review of Health Inequalities in England post 2010

⁷ Maternity Matters, 2007; Lewis G (ed). Confidential Enquiries into Maternal and Child Health. Why Mothers Die The Sixth Report of the United Kingdom Enquiry into maternal deaths 2000-2002 (2004)

⁸ Maternity Matters, 2007;

⁹ Consensus views arising from the 56th Study Group: Reproductive Ageing, Royal College of Obstetricians and Gynaecologists, 2009

Other social factors that impact on maternal health in pregnancy include substance misuse, recent arrival as a migrant, asylum seeker or refugee status, difficulty speaking or understanding English, domestic abuse, poverty and homelessness¹⁰.

It is estimated 30% of **domestic violence** cases start or escalate during pregnancy¹¹ and domestic violence is associated with increases in rates of miscarriage, low birth weight, premature birth, fetal injury and fetal death. A woman who is experiencing domestic abuse may have particular difficulties using antenatal care services: for example, the perpetrator of the abuse may try to prevent her from attending appointments. The woman may be afraid that disclosure of the abuse to a healthcare professional will worsen her situation, or anxious about the reaction of the healthcare professional¹². 14% of all women who died during pregnancy or within 42 days after birth had reported that they were subjected to domestic violence¹³

Female genital mutilation (FGM) comprises all procedures that involve partial or total removal of the external female genitalia, or other injury to the female genital organs for non-medical reasons. FGM is defined into four types:

- Type 1: Partial or total excision of the clitoris
- Type 2: As above with partial or total excision of labia minora
- Type 3: Excision of part or all of external genital and stitching/narrowing of vaginal opening
- Type 4: Other, e.g. piercing of clitoris, cutting vagina, introducing corrosive substance into vagina

The procedure has no health benefits and can cause severe bleeding and problems urinating, and later cysts, infections, infertility as well as complications in childbirth increased risk of newborn deaths¹⁴. *See FGM factsheet.*

National statistics highlight that **smoking in pregnancy** is associated with a number of social factors including age and socio-economic position. Mothers aged 20yrs or below are 5 times more likely to smoke than those aged 35yrs and over (45% and 9% respectively). Women who have smoked throughout their pregnancy tend to be employed in routine or manual occupations, are less educated, live in rented accommodation, are single or live with a partner who smokes¹⁵. *See smoking and pregnancy factsheet.*

Alcohol and substance misuse is linked to risk factors at both individual and community level, many of which are present in Tower Hamlets including: high population density, overcrowding, high rates of unemployment and poverty, poor physical health and poor mental health. *See Adult substance misuse JSNA.*

¹⁰ NICE guidance on complex social factors

¹¹ Maternity Matters, 2007; British Medical Association Domestic violence: a health care issue? 1998

¹² NICE CG110, Pregnancy and complex social factors, 2010

¹³ CEMACH Saving Mothers Lives

¹⁴ WHO Fact sheet N°241, February 2012

¹⁵ British market research bureau 2007

Women from disadvantaged groups are more likely to have a **poor diet** and to be either to obese or to show low weight gain during pregnancy¹⁶. Mothers from these groups are also less likely to take folic acid or other supplements before, during or after pregnancy¹⁷. *See maternal and early year's nutrition fact sheet.*

Behavioural risk factors

Smoking during pregnancy increases the risk of complications during labour, miscarriage, premature birth, still birth, low birth weight, sudden unexpected death of the infant and can also impact on long-term physical growth and intellectual development of the child.

Alcohol consumption during pregnancy increase the risk of miscarriage and can damage the developing foetus

Nutritional status - a pregnant woman's health, both in the short and long term, depends on how well-nourished she is before, during and after pregnancy. Improving the nutrition of pregnant and breastfeeding mothers in low income families is a recognised priority¹⁸. Improved nutrition in pregnancy has the potential to improve infant health and reduce health inequalities.

Adequate intake of folic acid preconception and during the first trimester is important to prevent neural tube defects. Women from disadvantaged groups have a poorer diet and are more likely either to be obese or to show low weight gain during pregnancy. Mothers from these groups are also less likely to take folic acid or other supplements before, during or after pregnancy¹⁹.

Vitamin D has important effects on calcium and phosphate regulation and thus helps ensure healthy bone growth and mineralization. Vitamin D deficiency typically presents with bony deformity (rickets) or hypocalcaemia in infancy and childhood, and with musculoskeletal pain and weakness in adults (osteomalacia). Guidelines suggest dietary supplementation for higher risk groups such as pregnant and breastfeeding women to prevent vitamin D deficiency.

Iron deficiency in pregnant women pre-conception and during pregnancy is associated with impaired foetal growth and impaired cognitive development in the child post birth.

Obesity in pregnancy. The Confidential Enquiry into Maternal and Child Health (CEMACH) (2007) highlighted that obesity in pregnancy (BMI ≥ 30 Kg/m² at first antenatal consultation) carries significant risks and identified that over half the women who died either directly or indirectly from pregnancy related causes were overweight or obese.

Obesity increases the health risks to the mother during the antenatal, intrapartum, and postnatal periods. The CEMACH report (2003-2005) summarises the risks related to obesity during pregnancy for the mother as:

¹⁶ Bull et al. 2003; Food Standards Agency 2007; Heslehurst et al. 2007; NICE PH11, Maternal and child nutrition (2008)

¹⁷ Bolling et al. 2007; NICE PH11, Maternal and child nutrition (2008)

¹⁸ Improving the nutrition of pregnant and breastfeeding mothers and children in low-income households. NICE Public Health Guidance 11, HMSO, March 2008.

¹⁹ Bolling et al. 2007; NICE PH11, Maternal and child nutrition (2008)

maternal death or severe morbidity, cardiac disease, spontaneous first trimester and recurrent miscarriage, pre-eclampsia, gestational diabetes, thromboembolism, post-caesarean wound infection

- infection from other causes
- postpartum haemorrhage
- low breastfeeding rates

Babies born to obese women also face several health risks including a higher risk of fetal death, stillbirth, congenital abnormality, shoulder dystocia, macrosomia and are at higher risk of becoming obese themselves.

The psychological impact of obesity during pregnancy is relatively unexplored. Issues raised in qualitative research include: a sense of greater social acceptance of increased body size during pregnancy, difficulties experienced in adjusting to post-pregnancy body shape, anxieties experienced by both women and healthcare professionals about raising the topic of obesity during pregnancy, a lack of awareness of the risks associated with obesity during pregnancy amongst some women and the potential for a negative impact on the psychological wellbeing of mothers by drawing attention to their weight.

See maternal obesity factsheet

Pre-existing and pregnancy related clinical conditions

Pre-existing clinical conditions can cause complications in pregnancy and pregnancy can also increase the risk or trigger many of these conditions

Mental disorders during pregnancy and the postnatal period can have serious consequences for the health and wellbeing of the mother and her baby, as well as for her partner and other family members²⁰. 17% of all direct, indirect and late (between 42 days to one year after delivery, miscarriage or abortion) maternal deaths were due to or associated with psychiatric causes²¹. A mothers' mental health is significantly associated with child development outcomes, particularly social, behavioural and emotional development²².

Pregnancy and childbirth increase the risk of mental illness. Postnatal depression (PND) can be defined as any non-psychotic depressive illness of mild to moderate severity occurring during the first postnatal year. It is common, and the incidence of depression in the first month after childbirth is three times the average monthly incidence in non-childbearing women. A meta-analysis of studies mainly based in the developed world found the incidence of PND to be 12-13%, and the national incidence is estimated at least 13%²³. Risk factors include past history of psychopathology, low social support, poor marital relationship, and potentially unplanned pregnancy, unemployment, antenatal parental stress or having two or more children

See adult mental health factsheet.

Diabetes in pregnancy (both pre-existing and gestational) is associated with increased risk of stillbirth, congenital

²⁰ NICE CG45, Antenatal and postnatal mental health (2007)

²¹ CEMACH Saving Mothers Lives

²² Families in the foundation years, DfE, 2011

²³ www.patient.co.uk; NICE Clinical Guideline CG45 Antenatal and postnatal mental health

malformations, macrosoma, birth injury, perinatal mortality and postnatal adaptation problems (such as hypoglycemia). In addition diabetic retinopathy can worsen rapidly during pregnancy. Gestational diabetes is diabetes that first arises during pregnancy and usually ends after pregnancy but increases the longer term risk of the women developing type 2 diabetes. *See diabetes in pregnancy factsheet*

Hypertensive disorders during pregnancy carry risks for the woman and the baby. Although the rate of eclampsia in the United Kingdom (UK) appears to have fallen, hypertension in pregnancy remains one of the leading causes of maternal death in the UK. Hypertensive disorders during pregnancy may also result in substantial maternal morbidity and also carry a risk for the baby²⁴

Infectious diseases affecting the mother can also damage the health of the fetus and newborn child, in particular HIV, Hepatitis B, Rubella and Syphilis.

Access to high quality, patient centred healthcare

Women who delay their **antenatal care** have been found to have worse outcomes for themselves and their babies than those who access maternity care at an earlier stage of their pregnancy²⁵. Pregnant women with complex social factors may have additional needs over the routine care for healthy pregnant women however have been found to be discouraged from using antenatal services²⁶ due to a range of reasons including :

- Feeling overwhelmed by the involvement of multiple agencies
- Not being familiar with ante-natal care services
- Having practical problems which prevents them attending antenatal appointments
- Finding it hard to communicate with healthcare staff
- Feeling anxious about the attitudes of health care staff.

2. What is the local picture?

Social factors

Tower Hamlets has very high levels of deprivation with the fourth highest index of multiple deprivation (IMD) score in country; 80% of the population live in 20% of the most deprived areas in the country; 67% of the under 15 population live in low income households; the highest level of child poverty in the country. The high level of deprivation and reflected in the housing with 59% living in council housing, 15% housing association and 33% private rented accommodation classified as 'non decent'.

A relatively high proportion of women in Tower Hamlets (59.8%) are of child bearing age, 15-44 years, compared to London (47.6%) and England (40.0%)²⁷. No increase in the age group is predicted by 2016 or 2021²⁸.

²⁴ NICE guidance check

²⁵ Maternity Matters, 2007

²⁶ Nice CG 110, Pregnancy and complex social factors, 2010

²⁷ ChiMat Demographic profile for Tower Hamlets (2009)

²⁸ 2011 Round of Demographic Projections – SHLAA – Tower Hamlets

There were 4545 babies born to Tower Hamlets mothers in 2011. This equates to a birth rate of 60.4 per 1000 women aged 15-44 and is lower than the London average (61.1 per 1000)²⁹. [1] Approximately 45% half of these births were to Bangladeshi mothers .

The three largest ethnic groups are Bangladeshi, White and Black (including Somali), each with different patterns of maternal health risk.

Table 1 Numbers and proportions of women of childbearing age by main ethnic groups in Tower Hamlets - 2011³⁰

Ethnicity	Age groups (years)						Total by ethnic group	% by ethnic group
	15-19	20-24	25-29	30-34	35-39	40-44		
	% of women of child bearing age by age and ethnic group							
All ethnicities	7,003	12,999	18,067	14,890	11,596	9,000	73,554	100
White	22.5%	59%	63.0%	57.8%	51%	48.4%	39,509	53.71
Black Caribbean	1.9%	1.0%	0.9%	1.4%	1.8%	2.9%	1076	1.46
Black African	3.8%	1.6%	1.5%	2.1%	2.9%	3.9%	1762	2.40
Black other	2.3%	1.0%	0.8%	1.0%	1.3%	1.6%	875	1.19
Indian	2.5%	2.3%	2.4%	2.6%	2.7%	2.0%	1859	2.53
Pakistani	6.4%	0.4%	0.3%	0.3%	0.3%	0.4%	269	0.37
Bangladeshi	58%	26.2%	22.1%	25.4%	30.5%	30.2%	21510	29.24
Chinese	3.2%	5.4%	5.5%	5.2%	4.3%	4.0%	3548	4.82
Other Asian	2.1%	1.1%	1.1%	1.3%	1.5%	1.7%	999	1.36
Other	3.0%	2.1%	2.5%	3.0%	3.5%	3.9%	2146	2.92

Table 2 Proportions of births by main ethnic groups in Tower Hamlets Q3 2011/12 – Q2 2012/13³¹

Ethnicity	Age groups (years)					Total by ethnic group	% by ethnic group
	<18	18-20	21-25	26-29	30+		
	% births by age and ethnic group						
All ethnicities	23	140	809	1100	2117	4189	100
British-White	30.43%	29.29%	13.84%	11.18%	13.93%	578	13.8
Irish - White	0.00%	0.00%	0.12%	0.09%	0.47%	12	0.29
Other White	4.35%	3.57%	4.82%	5.55%	9.02%	297	7.09
Caribbean - mixed	0.00%	2.14%	0.87%	0.55%	0.24%	21	0.50
African - mixed	0.00%	0.00%	0.25%	0.27%	0.24%	10	0.24
White and Asian	0.00%	1.43%	0.25%	0.09%	0.14%	8	0.19
Other mixed	0.00%	1.43%	0.12%	0.55%	0.52%	20	0.48
Indian	0.00%	0.00%	1.61%	2.91%	2.69%	102	2.43

²⁹ ONS. Births by Area of Usual Residence of Mother, England and Wales, 2011. Released: 31 October 2012.

³⁰ GLA ethnic group projections 2011 round, SHLAA, borough - standard fertility – Tower Hamlets, 2012

³¹ Barts Health Tower Hamlets - CRS

Pakistani	0.00%	0.71%	1.85%	1.73%	1.18%	60	1.43
Bangladeshi	34.78%	42.14%	52.66%	54.91%	44.07%	2030	48.86
other Asian	0.00%	3.57%	5.07%	3.27%	3.16%	149	3.56
Caribbean	8.70%	0.71%	0.49%	1.18%	0.76%	36	0.86
Black British	4.35%	0.71%	4.57%	5.36%	7.46%	256	6.11
Other Black, Black Unspecified	8.70%	1.43%	1.48%	0.82%	1.46%	56	1.34
Chinese	0.00%	1.43%	0.49%	2.36%	3.12%	98	2.34
Any Other Group	4.35%	4.29%	3.34%	3.55%	4.06%	159	3.80
Not stated	4.35%	7.14%	8.16%	5.64%	7.46%	297	7.09

The three largest ethnic groups in Tower Hamlets for women of child bearing age in Tower Hamlets, 'White', 'Bangladeshi' and 'Black', represent 53.7%, 29.24% and 5.05% of all ethnic groups respectively. The birth rate however is higher for the Bangladeshi and Black populations compared to their population size with total births being 21.2% 'White', 48.86% Bangladeshi and 9.05% Black.

See the factsheet on infant mortality for information on birth weight and infant mortality

Teenage conceptions and births

The 2008-2010 3 year average for teenage conceptions (<18 years) was 342, a rate of 35.3/1000 in Tower Hamlets compared to a rate of 41.9/1000 for London and 38.1/1000 for England. This has decreased from 586, a rate of 50.6/1000 in Tower Hamlets, 50.7/1000 London and 45.0/1000 for England for the 1998-2000 average.³²

In 2009, 66% (87) of conceptions under the age of 18 led to an abortion. This is higher than the average for England (49%) and for London (61%). Although the number and rate of 15-17 year olds conceiving decreased from the 2003-05 period to the 2006-08 period, the percentage of U18 conceptions leading to abortion has increased slightly.

See the separate factsheet on teenage pregnancy for further information

Domestic violence

The midwifery Gateway team based at the Royal London Hospital works with vulnerable pregnant women and their families. The team has seen an increase in referrals for domestic violence from 2010/11 to 2011/12 of 23.8%. See table 3.

Table 3. Referrals to Gateway Team for women who have been victims of domestic violence³³

Reason for referral	No. of referrals 2010/11	No. of referrals 2011/12	% increase
Domestic abuse	113	140	23.8%

³² Teenage conceptions (aged under 18): numbers and rates by local authority, 3-year averages. Updated September 2012

³³ Maternity Services Gateway Team Annual Report 2011/12.

Female genital mutilation (FGM)

In Tower Hamlets, based on maternity audit data, FGM is most prevalent in the Somali community. The Somali population, although not separately identified in the GLA data, has been recently estimated to be between 2.3% and 3%.

A preliminary assessment of all maternity notes for women of African, Indian and Pakistani origin, delivering between January and February 2010, (n=63) found:

- 13/29 (44.8%) of Somali women had documented FGM.
- No evidence of FGM in other groups (total 34 patients)

The audit was extended to include Somali population only to ensure the highest possible yield for determining how FGM in pregnancy was being managed.

In the period January to July 2010, 74 Maternity notes were retrieved with 47 of these notes being for Somali women³⁴. 44 of these women had experienced FGM, 15 had previous repair (reversal), 10 had FGM recorded in the birth register and 19 had FGM recorded in their maternity notes. No women were documented as having type 3 FGM which was unexpected as according to WHO figures, Type 3 is most prevalent type of FGM amongst Somali women

See FGM JSNA factsheet for further information.

Behavioural risk factors

Smoking in pregnancy

There is a relatively low and improving prevalence of smoking during pregnancy in Tower Hamlets 3.1% compared to London 6.1% and England 13.4% (Q3 2011/12). The prevalence of smoking at time of delivery is particularly low in pregnant women from the Bangladeshi community 0.84% of all maternities compared to 2.2% of white women (Q3 2011/12 – Q2 2012/13)³⁵. Within the group of women smoking at the time of delivery 61.2% are white and 23.0% Bangladeshi³⁶, see table 4.

Table 4. Smoking at time of delivery by ethnic group Tower Hamlets (Q3 2011/12 – Q2 2012/13)

	SATOD	% SATOD
British-White	93	61.2%
Bangladeshi	35	23.0%
Black	9	5.9%
Other	6	3.9%
Not stated	9	5.9%
	152	

See the smoking and pregnancy factsheet for further information

³⁴ Denise McEneaney, Lucy Shenton, Emma Trunchion. Audit: Management of Female Genital Mutilation in Pregnancy, 2010

³⁵ Barts Health Tower Hamlets maternity data

³⁶ Barts Health Tower Hamlets maternity data

Alcohol and substance misuse

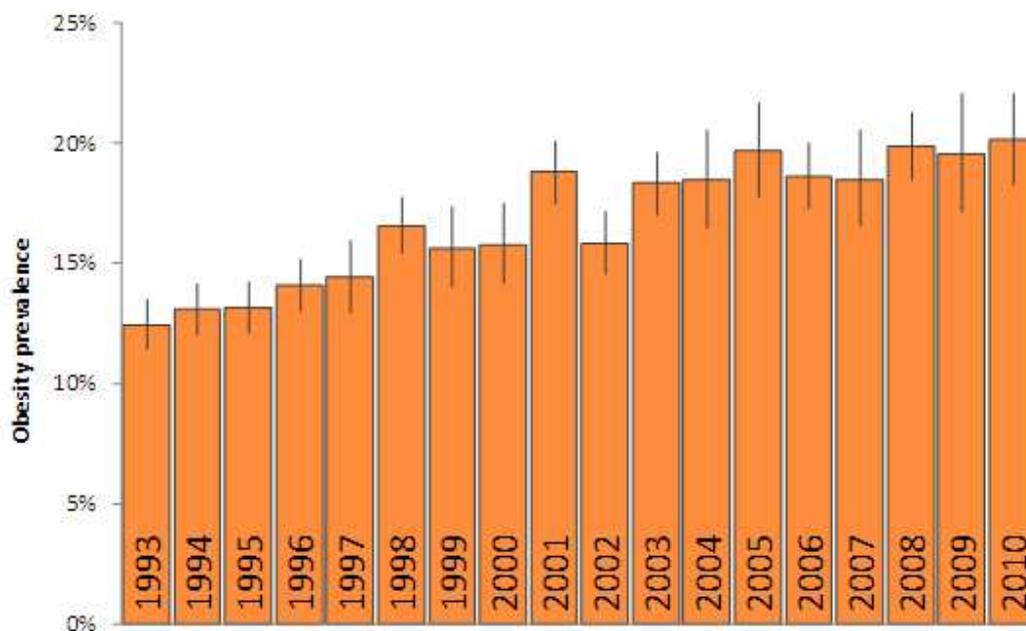
Although rates of alcohol consumption are relatively low in Tower Hamlets, due to a large abstinent population, high risk drinking amongst the population who do drink is common. 43% of people who drink alcohol in Tower Hamlets have harmful or hazardous drinking patterns³⁷. Data regarding referrals for alcohol or substance misuse to the midwifery Gateway team is not currently available.

Maternal obesity

12.3% of pregnant women in Tower Hamlets were found to have a BMI > 30 at booking (July – November 2012/13)³⁸. Statistics on the prevalence of maternal obesity are not collected routinely in the UK. Trend data from the Health Survey for England (HSE) for the period 1993 to 2010 show an increase in the prevalence of obesity (BMI at least 30 kg/m²) amongst women of childbearing age (16 to 44 years).

Figure 1: Prevalence of obesity (with 95% confidence intervals) in females aged 16-44 years during the period 1993-2010

Health Survey for England 1993-2010



Adult obesity: BMI ≥ 30 kg/m²

Two prospective audits undertaken at the Royal London Hospital during 2010 and 2011 showed a similar distribution across classes of obesity, with the majority of obese women falling into Class I BMI 30-34.9³⁹. See table 5.

³⁷ Tower Hamlets Alcohol Strategy

³⁸ Barts Health Tower Hamlets. NB: data has only been available for this period to date therefore at this stage represents a snapshot only.

³⁹ Obesity in Pregnancy, RLH, 12th July 2011.

Table 5 Prevalence by obesity class

	Jan-May 2011(97 sets of notes)	2010 (90 sets of notes)
Class I BMI 30-34.9	65%	62%
Class II BMI 34-39.9	26%	26%
Class III BMI 40+	9%	10%

Comparisons between the two audits showed a higher percentage of the women were employed and a lower proportion of women were aged under 25 years and higher proportion of the women were aged 36 years or above in 2011 (age range: 17-52 years). See table 6

Table 6 Demographics by obesity class

	Jan-May 2011 (97 sets of notes)	2010 (90 sets of notes)
English speaking	78%	80%
Employed	46%	28%
Age groups:		
<25 years	20%	30%
26-35 years	58%	57%
≥ 3 years	22%	13%

Maternal obesity - ethnicity

Data on ethnicity July 2012-November 2013 shows that the proportions of obese women by ethnic group is very similar to the ethnic profile of all pregnant women with 58.4% Bangladeshi, 23.1% White and 13.6% Black however Bangladeshi and Black are slightly overrepresented.

Maternal obesity - Pre-existing conditions

From the prospective audits, 28% of the obese women in 2011 (and 27% in 2010) had a pre-existing condition (hypertension, diabetes mellitus, venous thromboembolism or 'other'). Comparative data for all pregnant women at booking is not available.

Pre-existing and pregnancy related clinical conditions

Mental health⁴⁰

It was not possible to obtain local data for this health needs analysis, but since many of the risk factors listed above apply to a significant number of women in Tower Hamlets, it can be assumed that the incidence of PND is at least 13% if not more, which would have been about 570 women in 2009 (based on 4358 births), and 580 women in 2010/2011, assuming a projected number of births of 4,468.⁴¹

The Gateway midwifery team have seen an increase in referrals for women with severe mental illness. See table 5.

Table 7. Referral to Gateway midwifery team for severe mental illness

Reason for referral	No. of referrals 2010/11	No. of referrals 2011/12	% increase
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⁴⁰ Mental Health in East London and the City. A Sector-Level Health Needs Assessment. 2011

⁴¹ Tower Hamlets JSNA Core Dataset/ONS

Severe mental illness	373	382	10.2%
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Pre-existing and gestational diabetes

Audits at the Royal London Hospital (2007/08 and 2010) have found that 11-12% of pregnancies are complicated by diabetes.

Nationally, 87.5% of pregnancies complicated by diabetes are estimated to be due to gestational diabetes (GDM); with 7.5% being due to type 1 diabetes, the remaining 5% being due to type 2 diabetes⁴². In Tower Hamlets the proportions of Type 1 is significantly less than the national average; 1% (2010), whilst type 2 diabetes is significantly higher; 17.5% (2010)⁴³; proportions are reflective of population demography.

In 2005/6 a retrospective audit⁴⁴ at the Royal London hospital found that amongst those women diagnosed with GDM: 81.7% were Bangladeshi and 7.9% African compared to 4.1% Caucasian

See the gestational and pre-existing diabetes in pregnancy factsheet for further information.

Communicable diseases

According to Antenatal Infection Surveillance Scheme (AISS) data the proportion of women taking up a HIV test in pregnancy was 93% in NEL in 2009. The Royal London was below this average at 88.9%. In 2009, only 1% of new cases were 1% of cases were acquired through mother to child transmission in NEL clinics. The proportion of pregnant women with HIV in London has somewhat stabilised over the last five years. A decline in proportions testing positive was seen in 2009 in NE London, whilst London and England saw an increase in this rate. The NE London rate is slightly lower than the proportion of positives seen in pregnant women in London (0.39%) for the first time since 2004, but considerably higher than the England rate (0.22%). HIV rates in pregnant women seen at RLH are lower than for other hospitals in the NE London Sector; 0.09% in Tower Hamlets. Barking & Dagenham and Havering had the highest prevalence at 0.63%, followed by Newham (0.46%), and City & Hackney (0.43%).⁴⁵

Other infectious diseases that have an impact on neonatal health are Hepatitis B and syphilis.

The proportion of pregnant women (20.3%) who were Hepatitis B carriers is relatively high which would fit with the large Bangladeshi population resident in Tower Hamlets. Hepatitis B infection is frequent in most of Asia and sub Sahara Africa and about 8-10% of people in the general population become chronically infected⁴⁶

In 2010, syphilis rates in Tower Hamlets were 21.7 per 100,000, the highest prevalence in the NEL sector, followed by City and Hackney with a rate of 21.1 per 100,000. The lowest rate in the NEL sector, and for

⁴² CEMACH, 2007

⁴³ Tompkins N (2011). Diabetes & Pregnancy: Pre-existing Diabetes at The Royal London Hospital (Pregnancy Outcomes for 2010)

⁴⁴ A cohort of 291 GDMs who attended the Postnatal Diabetic Clinic between 1st June 2005 and 31st of May 2006

⁴⁵ HIV in North East London Epidemiology and Prevalence, 2009 data

⁴⁶ http://www.vaccinationnews.com/Scandals/may_24_02/WHOHepBFactS.htm; Sexual Health JSNA factsheet

London, was Havering with a rate of 1.3 per 100,000. The rate in London was 13.6 per 100,000 and for England, 4.8 per 100,000⁴⁷.

See the sexual health factsheet for further information

⁴⁷ HPA, 2010

3. What are the effective interventions?

Key evidence based interventions to promote maternal health and good outcomes of pregnancy include:

Addressing social factors

Improving educational attainment and access to employment and income for disadvantaged groups, particularly women

Over 30 years of US research into FNP has shown significant benefits for vulnerable young families in the short, medium and long term across a wide range of outcomes including :Increased maternal employment and improved school readiness

Ensuring adequate housing for vulnerable pregnant women, including teenagers⁴⁸.

Identification and support for women experiencing domestic violence, including FGM

The statutory guidance, *Working Together to Safeguard Children (2010)*, outlines how organisations and individuals should work together to safeguard and promote the welfare of children and young people in accordance with the Children Act 1989 and the Children Act 2004. This includes guidance regarding female genital mutilation including for midwives and doctors may become aware that FGM has been practised on an older woman and this may prompt concern for female children in the same family. Further information in support of these guidelines can be found in *Local Authority Social Services Letter LASSL (2004)*.

In addition to the statutory guidance The *guide to inter-agency working to safeguard and promote the welfare of children* are practice guidelines and are designed to be educative and provide advice and support to frontline professionals who have responsibilities to safeguard children and protect adults from the abuses associated with female genital mutilation (FGM).

Babies are eight times more likely to be killed than any other age group in childhood. And factors such as domestic violence, mental health problems, and drink and drug dependency among parents are known to be important risk factors in cases of abuse and neglect . In a review by the Lancet, (MacMillan 2009) the FNP was cited as one of only two programmes shown to prevent child maltreatment and as the home visiting programme with the best evidence base.

Maternal health promotion

Health education for young people and women of child bearing age

Including education on factors affecting maternal health and outcome of pregnancy and understanding of how to access antenatal services.

There is strong evidence that SRE programmes help to delay first sex and make it more likely that young people will use contraception when they become sexually active.⁴⁹

⁴⁸ DCSF. Teenage Parents Next Steps: Guidance for Local Authorities and Primary Care Trust. 2007.
<https://www.education.gov.uk/publications/standard/Teenagepregnancysexualhealth/Page1/DCSF-00597-2007>

Reduce the number of unplanned teenage conceptions⁵⁰

Improving young people's access to and use of effective contraception when they need it via provision of young people focused contraception/sexual health services, trusted by teenagers and well known by professionals working with them. Early intervention programme with those most at risk by tackling the underlying factors that increases the risk of teenage pregnancy – such as poverty and low aspirations.

See teenage pregnancy JSNA

Access to preconception information and care

All women should be advised to take 5mg Folic acid from at least 4 weeks pre-conception and throughout the first trimester.

Women with pre-existing medical conditions, including psychiatric conditions, whose conditions may require a change of medication should be informed of how this may relate to their pregnancy⁵¹

Support smoking cessation during pregnancy

NICE says all pregnant women who smoke – and all those who are planning a pregnancy or who have an infant aged under 12 months – should be referred for help to quit smoking. Reducing the number of women who smoke prior to conception, during pregnancy and postnatally is a very important public health measure which can prevent serious pregnancy-related health problems. Specific recommendations include:

- Identifying pregnant women who smoke and referring them to NHS Stop Smoking Services – action for midwives
- Identifying pregnant women who smoke and referring them to NHS Stop Smoking Services – action for others in the public, community and voluntary sectors
- NHS Stop Smoking Services – initial and ongoing support through interventions such as cognitive behaviour therapy, motivational interviewing and structured self-help and support from NHS Stop Smoking Services.
- Use of NRT and other pharmacological support
- NHS Stop Smoking Services – meeting the needs of disadvantaged pregnant women who smoke
- NHS Stop Smoking Services should work with partners and others in the household who smoke
- Staff delivering interventions should be who deliver intensive stop-smoking interventions (one-to-one or group support – levels 2 and 3) should be trained to the same standard as NHS stop-smoking advisers.

See smoking in pregnancy factsheet

⁴⁹ NICE. Pregnancy and complex social factors: A model for service provision for pregnant women with complex social factors. 2010

⁵⁰ NICE. Pregnancy and complex social factors: A model for service provision for pregnant women with complex social factors. 2010

⁵¹ Saving Mother's Lives: reviewing maternal deaths to make motherhood safer: 2006-2008 The Eight Report on Confidential Enquiries into Maternal Deaths in the United Kingdom. BJOG 2011

Alcohol consumption during pregnancy

Pregnant women who misuse substances may be anxious about the attitudes of healthcare staff and the potential role of social services. They may also be overwhelmed by the involvement of multiple agencies. These women need supportive and coordinated care during pregnancy.⁵²

Pregnant women and women planning a pregnancy should be advised to avoid drinking during the first three months of pregnancy. If women choose to drink alcohol during later pregnancy they should be advised to drink no more than 1-2 UK units once or twice a week. Women should be informed that getting drunk or binge drinking during pregnancy may be harmful to the unborn baby⁵³.

Promote good nutrition and physical activity

Dietary interventions which recognise the specific circumstances facing low-income families, teenage parents and mothers from minority ethnic or disadvantaged groups are likely to be more effective than generic interventions.

A multidisciplinary approach (involving and supporting the families themselves and the wider community) is the most effective option. It is important that the team involved adopts a non-judgemental, informal and individual approach based on advice about food (rather than just nutrients).

Dispel any myths about what and how much to eat during pregnancy.⁵⁴

Provide women with information and advice on the benefits of taking a vitamin D supplement (10 micrograms [µg] per day) during pregnancy and while breastfeeding. Provide Healthy Start vitamin supplements (folic acid and vitamin C and D) for all eligible pregnant women⁵⁵.

Advise that moderate-intensity physical activity will not harm her or her unborn child. At least 30 minutes per day of moderate intensity activity is recommended. Give specific and practical advice about being physically active during pregnancy. Explain to those women who would find physical activity difficult that it is important not to be sedentary, as far as possible.⁵⁶

Promote healthy weight during and after pregnancy

The key components of weight management before, during and after pregnancy are:

- information and support for women with a body mass index (BMI) of 30 kg/m² or more who are preparing for pregnancy (including weight loss support programmes)
- identification and referral of pregnant women with a BMI of 30 kg/m² or more and supporting women after childbirth to attain a healthy weight

⁵² NICE CG110. Pregnancy and complex social factors: A model for service provision for pregnant women with complex social factors.

⁵³ NICE guidance (CG62) Antenatal care

⁵⁴ NICE (PH27) Weight management before, during and after pregnancy

⁵⁵ Maternal Nutrition (NICE PH11, 26 March 2008)

⁵⁶ NICE (PH27) Weight management before, during and after pregnancy. NICE (CG62) Antenatal care

- developing high-quality community-based services for weight management before, during and after pregnancy.

See maternal obesity factsheet

[Pregnant women who are recent migrants, asylum seekers or refugees, or who have difficulty reading or speaking English](#)

Those responsible for the organisation of local antenatal services should provide information about pregnancy and antenatal services, including how to find and use antenatal services, in a variety of: formats, settings and languages.

[Improving access to high quality, patient centered antenatal care](#)

The care that is offered to all pregnant women needs to be women centred, using effective communication skills to enable informed decision making throughout the ante-natal period. Ways of improving the quality of antenatal care needs to be integral to the services being offered.

[Early access to maternal care](#)

Increasing the proportion of pregnant women who book for antenatal care before 12 weeks gestation is important to ensure early informed access to antenatal screening, and enables the midwife to identify women at higher risk of poor outcomes, ensure care is right for the women and that high quality information is provided to inform choices about health related behaviours (e.g. parenting skills, smoking, nutrition and alcohol), where to have the baby and pain relief. Access to antenatal care needs to be improved by widening the choice of access and the type of antenatal care available to encourage booking on time.

[Woman-centred care and informed decision making , including access to antenatal classes](#)

Pregnant women should be offered information based on the current available evidence together with support to enable them to make informed decisions about their care. This information should include where they will be seen and who will undertake their care.

[Identification and control of existing and pregnancy associated clinical conditions e.g. diabetes, hypertension and mental illness](#)

Women whose pregnancies are likely to be complicated by potentially serious underlying medical or mental health conditions, and women who develop these conditions should be immediately referred to appropriate specialist centres where care can be optimised⁵⁷

If a woman has a pre-existing medical condition or has had a previous complicated birth that makes her at higher risk of developing complications during her next birth, she should be advised to give birth in an obstetric unit.

⁵⁷ NICE (CG62) Antenatal care

Access to specialist care for high risk women with complex social factors

In particular: women who misuse substances (alcohol and/or drugs), women who are recent migrants, asylum seekers or refugees, or who have difficulty reading or speaking English, young women aged under 20, women who experience domestic abuse⁵⁸. Services for women with complex social factors should be tailored to meet the needs of these individual women, by communicating sensitively and reinforcing the contact made at the first booking appointment. Improved coordinated care particularly between statutory organisations is required to provide maximum support especially for pregnant women with complex needs.

Advocacy and translation services for women who have difficulties with reading or speaking English

Informed access to antenatal screening

Ensuring that all pregnant women have access to screening for fetal anomalies, sickle cell and thalassaemia and infectious diseases (HIV, Hepatitis B, Syphilis and Rubella susceptibility) which needs to be supported with balanced and accurate information about the condition being screened for.⁵⁹

One to one care

It is recommended that all women have access to a midwife who they know and trust throughout their pregnancy

Access to home births or a midwife led unit for low risk women

- Every women should be offered a choice of where to give birth (depending on circumstances)
- The available information on planning place of birth is not of good quality, but suggests that among women who plan to give birth at home or in a midwife-led unit there is a higher likelihood of a normal birth, with less intervention.
- Pregnant women should be offered evidence-based information and support to enable them to make informed decisions about childbirth. Addressing women's views and concerns should be recognised as being integral to the decision-making process.
- Women should also be offered the choice where their postnatal care takes place

Caesarian section

- Reduce number and percentage of caesarians without being first offered evidence-based information and support to enable them to make informed decisions about childbirth
- NICE CG132 – caesarean section, provides guidelines including for mothers with HIV and following maternal request e.g. associated with anxiety about childbirth.

Infection control

All pregnant women and recently delivered women need to be informed of the risks and signs and symptoms of genital tract infection and how to prevent its transmission and all health care professionals should be aware of the signs and symptoms of sepsis⁶⁰

⁵⁸ NICE guidance on antenatal care for women with complex social factors

⁵⁹ NICE (CG62) Antenatal care

4. What is being done locally to address this issue?

Addressing social factors

Improving educational attainment and access to employment and income for disadvantaged groups, particularly women

The Family Nurse Partnership (FNP) is an early intervention programme for young, first time parents. FNP achievements in Tower Hamlets relate to education and employment together with a range of other areas.

Ensuring adequate housing for vulnerable pregnant women, including teenagers

Specific housing is provided for vulnerable pregnant teenagers that meets the minimum standard, as well as advice and support to promote health and well-being by working in partnership with relevant services.

Identification and support for women experiencing domestic violence, including FGM

Domestic violence and safeguarding children

Domestic violence in relation to maternity services is addressed by a number of departments, including the Safeguarding Children team which is currently reviewing its domestic violence strategy. Following Neighbourhood Renewal Funding, all Tower Hamlets PCT health visitors received training on 'routine questioning' for domestic violence in accordance with 'Responding to domestic abuse; a handbook for health professionals' (DH 2006). The PCT secured funding for a full time post to lead on its domestic violence strategy for both adult and child victims. As part of the strategy, information sharing between the PCT's Safeguarding Children team and the midwifery service was agreed, with regards to police incidents where pregnant women are the victims of domestic violence.

Violence against Women and Girls Strategy 2012-2015 (LBTH). The strategy sets out four important objectives for our borough – to develop a better understanding of violence against women and girls and its impact in our borough, to intervene early in ensuring violence is prevented wherever possible, to support and protect victims, and to hold perpetrators to account. Challenging the attitudes, behaviours and practices that allow Violence against Women and Girls to prevail is also key to this strategy. Examples of the types of violence included are:

- Rape and Sexual Violence
- Domestic Violence
- Trafficking
- Prostitution and Sex work
- Sexual Exploitation
- (Criminal) Gang related initiation practises against women and girls
- Female Genital Mutilation (FGM)
- Forced Marriage
- Honour Based Violence

⁶⁰ Saving Mother's Lives: reviewing maternal deaths to make motherhood safer: 2006-2008 The Eight Report on Confidential Enquiries into Maternal Deaths in the United Kingdom. BJOG 2011

- Dowry Related Abuse
- Harassment
- Stalking

An interdisciplinary, cross sector group has been also established to scope service development regarding FGM in Tower Hamlets.

Maternal health promotion

Tower Hamlets Maternity Health Improvement Strategy 2010-2012

The aim of the strategy is to ensure that maternity services and key partner agencies in Tower Hamlets take every opportunity to promote the health and well being of the mother and developing baby. It was developed by the Maternity Health Improvement sub- group which was initially accountable to the Tower Hamlets Maternity Improvement Board, one of four time-limited sub groups set up to take forward the recommendations of the Tower Hamlets Maternity Services Review, and now to the Tower Hamlets Maternity Quality Group. The strategy is currently being refreshed to incorporate new NICE guidance and local service changes.

Health education for young people and women of child bearing age

Including: sex and relationships education, awareness of factors affecting maternal health and outcome of pregnancy and understanding of how to access antenatal services

Reduce the number of unplanned teenage conceptions

Tower Hamlets Teenage Pregnancy strategy seeks to tackle unplanned teenage conceptions and support for teenage parents. Reducing local teenage conception is included within a broader strategy of improving Sexual Health and Children and Young People's Plan.

See teenage pregnancy factsheet

Access to preconception information and care e.g. preconceptual intake of folic acid

Further work is required in this area.

An audit of 90 obese pregnant women for example found that only 28% women had pre-conception folic acid despite the recommendation that all women should be advised to take 5mg Folic acid from at least 4 weeks pre-conception and throughout the first trimester.

Support for smoking cessation during pregnancy

A smoking cessation in pregnancy service is commissioned by Public Health. The service aims to increase the number of women who are referred to stop-smoking services, as well as increase the number who successfully stop smoking.

See smoking and pregnancy factsheet

Promoting healthy weight during and after pregnancy

- 1:1 with dietitian/physiotherapist/psychologist for women with a BMI >25kg/m² at booking.
- For women without co-morbidities group sessions offered for women with a BMI >25kg/m² at booking.
- Postnatal groups: 6 sessions (1.5 hour) of nutrition/psychology and exercise over a 6 week period.
- Physiotherapist led sessions with dietetic and psychology input. Postnatal: 15-30minutes nutrition/psychology and 45 minutes of exercise session.
- Referral to child weight management services to reduce risks to child as well as supporting mother

Breastfeeding and the Baby Friendly Initiative

See maternal, infant and early year's nutrition JSNA factsheet.

Improving access to high quality, patient centered care

Barts and the London Maternity Service

Barts and The London NHS Trust provides a full range of maternity services from community care by midwives to multi-specialty, consultant-led hospital care. These services have been extended to include midwife-led care at the Barkantine Birth Centre for women who have had a normal pregnancy and have been identified as at low risk.

Early access to maternal care i.e. booking by 12+6 weeks

As a result of service redesign by the maternity services; improved data management; and targeted community outreach education to advocate, educate and disseminate information in order to increase access to early antenatal care amongst women of childbearing age and their families in Tower Hamlets, the proportion of pregnant women booking for antenatal care by 12 weeks 6 days gestation has increased from 68.3% (2008/09) to 95.5% (2011/12)

Woman-centred care and informed decision making , including access to antenatal classes

Maternity Services Liaison Committee

A multi-disciplinary maternity services forum, where commissioners, public health, providers and users of maternity services bring together their different perspectives in partnership to plan, monitor and improve local maternity services.

Doula project (Maternity Mates)

Recruits and trains women from local communities to provide emotional and practical support to women during pregnancy, childbirth and the early weeks of family life. Particular attention being paid to those members of the local population who are isolated and vulnerable. The project steering group is developing a business for continued funding and sustainability of the service.

Antenatal Parenting Education Classes

The Tower Hamlets Maternity Review highlighted the need for increased and enhanced antenatal parenting education for women and their partners. In response, a new service was developed, bringing together a multi-agency team of midwives, health visitors, bi-lingual support workers, breastfeeding support workers with administrative support to provide an extended programme ensuring all pregnant women are provided with

consistent information.

Expectant Fathers Programme (EFP)

The EFP builds father's confidence and skills leading to improved skills and ability to support partners and babies, increases information, so that new fathers engage more actively in the pregnancy, learn practical skills enabling them to be more competent and confident fathers. External funding was received to run the initial Expectant Father's programmes, which were supported by the antenatal education coordinators. The funding for this programme was discontinued however in 2011, the antenatal education coordinators received training to deliver the programme. This will now be delivered in addition to the 'standard' antenatal parenting education courses from 2012.

Children's Centres

Tower Hamlets Sure Start Children's Centres provide a range of antenatal and under-5s services to all families. The Centres promote maternal health pre-conceptually, during the antenatal and post natal periods such as providing advice on healthy eating, smoking cessation and exercise. Centres have clinical examination rooms which enable community midwives to review women during the antenatal and postnatal period, when it is a preferable venue for the family. This facility is used most effectively with "hard to reach" families. Children's Centres are key venues for delivering antenatal parenting education classes, including those specifically for teenagers.

Access to specialist care for high risk women, e.g. those with mental health problems, alcohol and substance misuse, teenage mothers, vulnerable first time mothers

Perinatal mental health services

A specialist perinatal mental health service provided by East London Foundation Trust has been set up to work in conjunction with existing maternity services. The service provides improved community based support for women with mental health difficulties, as well as training and support for professionals to help them to identify antenatal and postnatal depression. The team is led by a Consultant Psychiatrist, supported by a staff grade Psychiatrist and a clinical nurse specialist.

The Gateway Midwifery Team

This team provides intensive, specialist care for high-risk women during pregnancy, specifically:

- Pregnant women with severe, enduring mental health problems
- Pregnant teenagers
- Pregnant women exposed to domestic violence
- Pregnant women with complicated child protection issues
- Asylum seekers
- Women with learning or physical disabilities

Women are referred from community (e.g. GPs, Midwives and Health Visitors) or directly from other services (e.g. Mental Health Teams).

The Gateway team works closely with other services which target vulnerable pregnant women e.g. Children's

Centres, the Family Nurse Partnership, Options, the Seacole Clinic, Social Services Child Protection and the Perinatal Mental Health Service.

Family Nurse Partnership (FNP)

The Family Nurse Partnership (FNP) is an early intervention programme for young, first time parents. THPCT in partnership with the LBTH was one of the first 10 sites in England to embrace the opportunity of trialing a new way of working with vulnerable first time mums under 20. The model is strength-based, directed to optimising outcomes for families; it involves structured intensive visiting and support throughout pregnancy and until the child is two years old by family nurses who are qualified health visitors or midwives.

The Seacole Clinic

The Seacole Clinic offers a multi-agency service for pregnant women with problematic substance abuse. It works to the BLT Maternity Service Policy on Drugs and Alcohol. The clinic offers a non-judgemental service for pregnant women and their families. Care is provided on an individual basis with clients involved in decision making. The multidisciplinary team incorporates a specialist substance misuse midwife, key workers, medical staff, social workers, health visitors, midwives and special care baby unit staff. The clinic liaises with the Gateway team, for example in relation to Safeguarding Children, and hands over postnatal care to the Gateway team.

The clinic operates under the following guidance and legislation:

- The Children Act (1989)
- Working Together to Safeguard Children (2006)
- Drug misuses and dependence – guidelines on clinical management (1999)
- London Child Protection Procedures (2003)
- Hidden Harm (2003 Advisory Council on the Misuse of Drugs)
- Seacole Clinic Confidentiality agreement

Advocacy and translation services for women who have difficulties with reading or speaking English

- Bengali and Somali Health Advocacy and Interpreting Service available for expectant mothers
- Antenatal education classes available in Bangladeshi and Somali
- Team members of the breastfeeding support workers speak English, Bengali, Sylheti and Somali.

Identification and control of existing and pregnancy associated clinical conditions e.g. mental illness, diabetes and hypertension

Obstetric inpatient unit has a multi-disciplinary team including specially trained midwives who nurse both mother and baby is involved in the care of women with high-risk pregnancies and those women recovering after an anaesthetic.

Informed access to antenatal screening for fetal anomalies, sickle cell and thalassaemia and infectious diseases (HIV, Hepatitis B, Syphilis and Rubella susceptibility)

All women booking for antenatal care at Barts and the London are offered the nationally recommended antenatal and newborn screening programmes which are governed by advice issued by the National Screening Committee. There are currently difficulties in reporting coverage of the antenatal screening programmes due

to limitations of the CERNER IT system.

[Access to home births or midwife led birthing centres for low risk women](#)

Barts and The London Maternity Service supports and encourages home births for women who remain well in pregnancy and labour. The Barkentine Birth centre is a 'stand alone' midwife-led maternity centre for pregnant women booked to have their babies within the Tower Hamlets area.

[VBAC \(vaginal birth after caesarean section\) clinic](#)

VBAC stands for vaginal birth after caesarean section for women who plan to have a normal birth following a surgical birth. The purpose of this clinic is to meet women who have had one previous caesarean section and review the notes to determine why a caesarean section was necessary, and if another caesarean section should be recommended. If a normal birth is not contra indicated, the midwife running the clinic will discuss the risks and benefits of a normal birth against a planned caesarean section. The midwife will also advise on how to maximise your chance of a normal birth and discuss a plan of care for labour.

5. What evidence is there that we are making a difference?

Positive outcomes related to maternal health include:

- A 45% reduction in teenage pregnancy since 1998, compared with a national decrease of 24% and a London decrease of 27.4%;
- Reduction in births to women under 18 years from 8.6 to 4.9 (per 1000), and to women under 20 years from 22 to 11.8 (per 1000) ;
- Low prevalence of infant mortality despite high rates of low birth weight
- Increasing proportion of women booking for antenatal care before 12 weeks, from 68.3% (2008/09) to 95.5% (2011/12)
- Low and declining prevalence of smoking in pregnancy (status at delivery) from 6.6% (Q1 2009/10) to 3.1% (Q3 2011/12)
- Increasing prevalence of breastfeeding initiation from 80.5% (2008/09) to 88.3% (2011/12)
- Evidence of improved outcomes for vulnerable mothers being supported by Family Nurse Partnership in relation to breastfeeding initiation, stopping smoking, access to employment, education and training, involvement of fathers, referral to social services and use of contraceptives to prevent or delay second pregnancy
- Improved patient experience of maternity services
- Increase in the number of mothers attending antenatal parenting classes from 724 (2008/09) to 1609 (2011/12). Increase in partners attending from 490 (2008/09) to 1421 (2011/12)

6. What is the perspective of the public on support available to them?

Maternity services

- There is a standing item on the MSLC agenda for a report from the Mothers Support group (MSG). This report identifies a number of key areas of interest and concern raised by service users through the

community meetings and the MSG.

- The 2010 Care Quality Commission survey on service users' experience of maternity services covering mothers who gave birth at BLT during February 2010; completed with a response rate of 34%. CQC published a report based on 19 quality questions. BLT performs badly on scores for "staff during labour and birth" and for postnatal care. Comparing the results from the 2010 CQC survey with the similar 2007 Healthcare Commission survey shows that BLT has made improvements on nearly every measure. On 8 questions this improvement passes a test of statistical significance, indicating that it is highly unlikely to have been produced by chance. The results as a whole provide strong assurance that the service has made broad improvements.

The CQC report was discussed by MSLC and linked with the local Maternity User Experience Action Plan.

- PCT survey (January-February 2011). This is the local commissioner led survey, supported by maternity services, following up from the first piece of work completed in January 2010.
- Real-Time Feedback: Two "real-time" touch screen units have been located in the Postnatal Ward (Royal London Hospital) and in the reception of the Barkantine Birth Centre since 26 January 2010. These give patients and visitors the option to fill in a short survey on their experience of the service.

The PCT survey, the real-time feedback and the CQC survey⁶¹ all indicate that there have been improvements in the experience of maternity care at BLT. Whilst there are shortcomings to all these forms of evidence the combined picture provides good assurance that the quality of the maternity service is improving. This conclusion is supported by the comments and informal feedback received from the MSLC and from THINK.

- Regular **Breastfeeding Friendly Initiative** audits undertaken with service users. *See the maternal, infant and early years nutrition factsheet for details.*
- **Family Nurse Partnership**: *see appendix 2 for summary of focus group held on 28 May 2012 at Toyhouse Library Young parents' group*
- The **antenatal parenting education programme** undertakes an evaluation of each couple at the end of their four week course in order to assess the success of the course. Each audit has shown improvements in the service. *Audit available on request.*
- The **maternity outreach access project** received positive feedback from the participants and all participants found the information useful and practical. Example response:
 - 35% of women were not fully aware of the importance of Antenatal Services before the education workshops. After the workshops 62% of women said they were aware of the importance of using the

⁶¹ Maternity Services – Patient Experience Report. Enrico Panizzo, Patient Experience Co-ordinating Manager. March 2011

services.

A full report is available on request with details of responses from the service users including case studies.

- The evaluation of the **Doula project (Maternity Mates)** is currently being finalised. This includes gaining the perspective of the women from the community who have been trained, those who have been supported and health professionals involved in the training. The Tower Hamlets site is also being included in a DH funded national evaluation of Goodwin replication sites.

7. What more do we need to know?

The Infant Mortality Support National Team (2010) identified the following as gaps:

- Knowledge about the women who are booking late
- Links between housing and community nursing (HVs/Midwives) and do more formal arrangements need to be developed
- How well the advocacy role is working within maternity services.

Further areas where more information is required:

- A more accurate picture of prevalence and demography of the local women for modifiable risk factors e.g. early maternity access, smoking during pregnancy, breastfeeding, domestic violence
- The rate of planned versus unplanned caesarians
- Reasons for unplanned caesarians
- Prevalence of post-natal depression
- Prevalence of maternal obesity

8. What are the priorities for improvement over the next 5 years?

Key findings from this report:

- In Tower Hamlets many women experience modifiable factors which can impact on the health of during pregnancy and on infant mortality rates.
- Women who are vulnerable and disadvantaged are 20 times more likely to die from a pregnancy related complication than other women and infant mortality rates are higher in the more deprived areas of the country and within more vulnerable or disadvantaged groups.
- In Tower Hamlets, the prevalence of women booking has been improving each quarter, rising from 65% in quarter 1 2009/10 to 97.8% in quarter 3 2011/12.
- 11% of all pregnancies were complicated by diabetes in 2010
- Type 1 diabetes is significantly less than the national average, whilst type 2 diabetes is significantly higher in pregnancies complicated by diabetes; proportions are reflective of population demography.
- The low overall rate of smoking during pregnancy however masks the significant differences between ethnic groups. White women are over-represented and there is concern about increasing rates in Bangladeshi women.
- FGM appears to be most prevalent in the Somali community.

Recommendations:

Data

- Improving the data by ensuring providers deliver information specified in contracts
- Improving the incompatible IT systems operating across the statutory sector
- Develop an accurate picture of prevalence and demography of the local women for modifiable risk factors e.g. early maternity access, smoking during pregnancy, breastfeeding, domestic violence
- Determine the local prevalence of post-natal depression
- Explore possibility an FGM audit with midwives across sites via a screen on the maternity system e.g. question at booking and then review at birth to assist in determining local prevalence
- Midwives to monitor the provision of Healthy Start vitamins to pregnant women

Other

- To build a communication strategy to inform women and their families how to access antenatal care; further work is required to increase access by the most vulnerable groups
- Facilitating the choice of the place of birth, including home births, and postnatal care
- Providing each woman with the support of a midwife she knows and trusts through pregnancy to postnatal care.
- Continuation of the Maternity Mates Doula programme to provide peer support for vulnerable women during pregnancy and in the first 6 weeks post birth
- Ensure that the most vulnerable young mothers have access to support from the Family Nurse Partnership by improving timeliness of referral and links to other services
- Secure funding for an effective Smoke Free Homes and cars programme in Tower Hamlets
- Work with partners to include maternity as part of partnership mental health and wellbeing strategy, and partnership substance misuse strategy action plan.
- Review and strengthen the ante and post natal depression pathway, raising awareness of the importance and links to safeguarding
- Review care pathway and raise awareness of Lead Consultant and midwives re: FGM and use of specialist service
- Maternity services teaching sessions to include detection and management of FGM
- Community engagement to encourage women to disclose if have FGM
- FGM to be documented as risk factor
- Explore offering external genital examination antenatally in high-risk groups
- Promote preconception uptake of folic acid and Healthy Start vitamins through Children's Centres
- Promote the uptake of Healthy Start vitamins for pregnant women at the antenatal booking appointment and subsequent review appointments
- Implementation of recommendations from the maternal obesity audit.
- Input into High BMI antenatal classes
- Improve referrals to antenatal and postnatal weight management service.
- Child weight management service to develop a postnatal buddy/peer Support for exit strategy after the group finishes

9. Key Contacts

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Date updated:	<i>January 2013</i>	Updated by:	<i>Dr Lisa Vaughan</i>	Next Update Due:	<i>Quarterly</i>
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Date signed off by Senior JSNA Leads:	<i>Date factsheet signed off by senior JSNA leads from Public Health and LBTH</i>	Signed off by (Public Health Lead):	<i>Esther Trenchard-Mabere, Associate Director PH</i>	Date signed off by Strategic Group:	<i>Date factsheet signed off by Strategic Group</i>	Sign off by Strategic Group:	<i>Name the relevant Strategic Group</i>
		Signed off by (LBTH Lead):	<i>e.g. Director of Adults/CFS</i>				

Appendix 1 – key references

- NICE CG132, Caesarian section (2011)
- NICE CMG36, Weight management before, during and after pregnancy (2011)
- NICE CG110, Pregnancy and complex social factors (2010)
- NICE PH11, Maternal and child nutrition (2008)
- NICE CG62, Antenatal care (2008)
- NICE CG45, Antenatal and postnatal mental health (2007)
- NICE CG55, Intrapartum care: Care of healthy women and their babies during childbirth (2007)
- NICE PH26, Quitting smoking in pregnancy and following childbirth (2010)
- NICE PH27, Weight management before, during and after pregnancy (2010)
- NICE PH3, Prevention of sexually transmitted infections and under 18 conceptions (2007)
- DH, Maternity Matters (2007)
- DH, The National Service Framework (NSF) for Children, Young People and Maternity Services² (2004)

Home births

The target for home births in Tower Hamlets is 2%; at YTD November 2011 this was 0.65%⁶²

Barkentine Midwifery led birthing centre

Births at the Barkentine are benchmarked to 450 per annum, with a target of 38-45 per month; at YTD November 2011 the average was 37 per month.

Caesarian

Currently local data isn't available on the rate planned versus unplanned caesarians. The total rate (planned and unplanned) was 25.1%, YTD November 2011; BLT target 23%.

Appendix 2 – FNP focus group held on 28/5/2012 at Toyhouse Library Young parents' group

Participants – 5 mums, 1 dad and six children

Participants were asked to reflect on the contribution of FNP, Midwifery, and Children's Centres to their experiences as parents. Very few questions were asked just enough to keep the discussion flowing and structured by starting with pregnancy, then infancy (birth to one year) and toddlerhood (1-2yrs). The discussion was taped. Signed informed consent was obtained from each parent.

RELATIONSHIP -TRUST/RELIABILITY/RESPECT/CREDIBILITY / CONFIDENCE/ SELF-EFFICACY / UNDERSTANDING/DADS/LEARNING/OWN NEEDS/FUTURE/FRIENDS

Pregnancy

The most important aspect of the programme cited by all the participants was getting to know the FN during pregnancy. They felt "comfortable" and secure knowing that "she was at the end of the phone". The preparation, learning, and use of materials during pregnancy could be revisited when the baby was born "we went over it again after the baby was born", "...I know let me look in the folder". They appreciated the consistency of care from pregnancy to infancy "you don't want anybody new when you've had your baby, you just want that same person".

⁶² BLT Maternity dashboard: clinical performance and governance, 2011/12

They valued the individualised care “she listened to my special needs...not biased, listened to everything we said”.

Some parents said they had found the Gateway midwife’s antenatal class “helpful”.

Infancy

The transition from pregnancy to looking after a baby at home was less challenging for the parents knowing that their FN would be visiting. “You feel like you don’t know what you’re doing so you think of going to the doctors, but you knew she was coming”. “I’d wait for her to come...so I didn’t panic”. “Sometimes I’d call her if I was really concerned”. The parents expressed confidence in their FN’s “I liked listening to someone who knows what they’re talking about”. Learning to understand how their babies felt and what they needed was valued, “I learnt that if I felt down my baby felt down as well”.

The parents expressed how their FN’s enabled them to develop the confidence to think for themselves. They talked about feeling “self-conscious” and being “judged” by family and others using services. “Everyone looks down on us because we’re young and think we don’t know what to do...we’re just teenagers”. “...just because I’m not forcing rice down his mouth...” “I felt too young to go there” “...how come you’re not going to school”. They talked about being able to overcome “the pressure” through learning with their FN, “she doesn’t make any judgements, she helps us work things out for ourselves”.

One mum described an incident when she took her baby to a clinic, which knocked her confidence in her capacity to breast feed, “If I didn’t have a family nurse I would have stopped breast feeding there and then...”

The parents debated the long-term drawbacks of not changing negative health behaviour and revealed a refreshing capacity to keep an open mind to learning, to consider the benefits of behaviour change and embrace new ways of doing things.

Toddlerhood

Some parents talked confidently about understanding their toddler’s behaviour “really helpful”. How they felt more “comfortable” and “relaxed”. How they have learnt to tolerate the “mess” toddlers make. “I just tidy up afterwards when he’s asleep”. “I don’t just say “no” I let him do what he’s doing”, “I talk to him”. “Each child is different!...I know what his needs are”.

Dads

A few mums talked about how the FN’s helped with their relationship with their partners. They talked about the benefits of involving the dads “My partner realised “I can be involved”. The only dad present said “It’s nice that I’m involved and not just the mother, you learn as well”.

Life’s challenges

Some parents talked about the benefits of having their FN around when life got tough, “she was calm and collected which I found really, really helpful”.

Future

“We didn’t know what to expect but she helped me to think about what my options were and what path I wanted to do down”