

Smoking and pregnancy: *Factsheet*

Tower Hamlets Joint Strategic Needs Assessment 2010-2011

Executive Summary

This fact sheet covers the effects of smoking behaviour prior to conception, during pregnancy and post delivery.

Supporting antenatal women to stop smoking is extremely important to prevent a range of serious pregnancy-health related problems including miscarriage and the unexpected death of an infant.

Gathering accurate statistics on women who smoke during their pregnancy is difficult because it usually relies on self reported smoking status. However with this caveat the national data highlights that the trend for women to smoke during pregnancy is decreasing.

In Tower Hamlets the number of women smoking during pregnancy is much lower than the national average due to the ethnic make up of the population although we cannot rule out the possibility of some under-reporting. We also need to monitor trends closely as demographic changes to the local population could result in an increased proportion of women smoking during pregnancy.

In Tower Hamlets a specialist stop smoking service for women who are pregnant has been commissioned by Public Health, delivered through Community Health Services working closely with the Royal London Hospital Maternity Unit. This service also works closely with the main Tower Hamlets stop smoking service and the service model is based on recently published NICE Guidance.

Recommendations

- Improve the surveillance data to identify the cohort of women who are smoking during pregnancy in Tower Hamlets and the success rates of the specialist smoking service
- Providing targeted strategies to focus on and support the small percentage of women in Tower Hamlets who are smoking through their pregnancy and evaluate their outcomes.
- Ensure all professionals working in the statutory and voluntary sector are continually informed about the specialist stop smoking service for pregnant women and are raising this issue at every opportunity.
- Continue to work to increase the referral rates from a wide range of front line agencies working with women in the antenatal and postnatal period.
- Review the work with the tobacco control alliance to implement an effective Smoke Free Homes and cars programme in Tower Hamlets.

• **Pregnancy and smoking: What are the issues?**

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. These include:

- Complications during labour and increased risk of miscarriage
- Premature birth
- Still birth
- Low birth weight
- Sudden unexpected death of the infant
- Impact on long-term physical growth and intellectual development

National statistics highlight that smoking in pregnancy is associated with a number of 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)¹. 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 smokes².

Children exposed to tobacco smoke in the womb are more likely to experience wheezy illnesses in their childhood and as infants they are more likely suffer from serious respiratory diseases if they are continually exposed to tobacco smoke in their environment³.

Non-smoking mothers who are exposed to second-hand smoke (i.e. where the partner smokes) during their pregnancy are at increased risk of giving birth prematurely⁴ and are also more likely to give birth (at full-term) to lower weight babies, than non-smoking mothers not exposed to second-hand smoke (i.e. non-smoking couples)

Nationally, the percentage of mothers reporting that they smoked throughout their pregnancy fell from 15.1% in 2006/07 to 13.5% in Q3 2010/11⁵. This downward trend is also reflected in mothers who don't work, falling by almost a third from 48% in 2000 to 33% in 2005.⁶

Nationally, in 2000 three-quarters of women who gave up smoking before or during their pregnancy were still not smoking when their baby was 4 – 10 weeks old⁷.

• **What is the local picture?**

Providing accurate data on the prevalence of smoking during pregnancy is difficult to obtain, as service providers, who collect the information generally tend to rely on self reported behavior. Due to the intense social pressure not to smoke during pregnancy some women may be unwilling to declare their true smoking status⁸. Work is being undertaken with midwifery services at the Royal London Hospital to encourage midwives to do carbon monoxide testing in order to collect more accurate information on smoking status. There remains a concern though that smoking during pregnancy may be underreported in Tower Hamlets.

There is a relatively low prevalence of smoking during pregnancy in Tower Hamlets compared to London and England, and the prevalence is decreasing in line with national trends

Table 1: Prevalence smoking at time of delivery: Tower Hamlets, London, England

¹ NICE PH Guidance 26

² British market research bureau 2007

³ NICE PH Guidance 26

⁴ Windham, 2000

⁵ Department of Health, NHS IC Omnibus, February 2011

⁶ Information Centre 2006

⁷ IFS 2000

	Tower Hamlets	London	England
Q4 2009/10 ⁹	5.5%	7.3%	14.1%
Q3 2010/11 ¹⁰	3.3%	6.8%	13.5%

Table 2: Prevalence smoking at time of delivery by quartile 2010/11: Tower Hamlets

	Q1	Q2	Q3	Q4
2010/11 ¹¹	5.6%	5.4%	3.3%	3.1%

The low figures reported in Tower Hamlets reflect the ethnic the make up of the population. In 2007/08 Bangladeshi women represented over 44% of pregnant women in the borough but only 1% of these women reported smoking on delivery in that year.

In 2008/09 birth rates for each ethnic group are as follows:

- Bangladeshi mothers: 44.8%
- White British mothers: 14.4%
- White Other mothers: 5.7%
- African mothers: 6.7%
- Other minority ethnic groups: 13.5%
- Ethnically mixed backgrounds: 14.9%

Table 3. Smoking status of pregnant mothers at delivery ethnicity of mother – Tower Hamlets, 2001-2003¹²

Ethnicity	2001	2002	2003
Bangladeshi	0.4%	0.4%	0.4%
Black African	0.8%	1.4%	1.9%
Black British/Other	16.0%	20.7%	15.8%
Black Caribbean	4.1%	17.5%	8.8%
Chinese	0.0%	0.0%	0.0%
Indian	2.9%	0.0%	4.2%
Not Known	9.7%	9.5%	6.4%
Other Groups	4.2%	11.9%	12.3%
Pakistani	3.3%	3.2%	0.0%
White British	19.6%	24.2%	24.5%

The low prevalence of smoking on delivery for the Bangladeshi population is consistent with national data that shows that a significantly lower proportion South Asian women report cigarette smoking than the general population

⁸ Webb

⁹ Department of Health, NHS IC Omnibus, 2009

¹⁰ Department of Health, NHS IC Omnibus, 2010

¹¹ BLT Maternity data

¹² North East London Public Health Statistics (E.L.V.I.S)

¹³ [Health Survey for England - The Health of Minority Ethnic Groups '99](#)

Table 4. Proportions of women who reported current cigarette smoking by ethnicity¹³

	Black Caribbean	Indian	Pakistani	Bangladeshi	Chinese	Irish	General population
Observed %	25	6	5	1	9	33	27

The low overall rate of smoking during pregnancy however masks the significant differences between different ethnic groups. In Tower Hamlets in 2007/08, smoking rates amongst white women were 16.2% compared with 1% amongst Bangladeshi women. For white women this is higher than the England average.

Due to improvements in reporting from the Royal London Hospital maternity service, updated demographic data including age and ethnicity will be available for 2011/12.

• What are the effective interventions?

The most recent NICE guidelines - **Public Health Guidance: How to stop smoking in pregnancy and following childbirth**¹⁴ www.nice.org.uk give clear recommendations on effective ways to support pregnant women to stop smoking.

An important message from the guidelines is that mothers who have only been advised to give up are more likely to quit than those who were advised to cut down (36% and 8% respectively). Mothers, who were given mixed messages i.e. to stop and cut down, were more likely to cut down rather than give up completely (58% and 14% respectively). Another important factor to consider is that pregnant women who smoke and have partners who smoke find it harder to quit and have a tendency to relapse even if they do quit initially.

Other evidence based recommendations include:

- The importance of midwives identifying pregnant women who are smoking or have recently stopped (in the last 2 weeks) and referring them to NHS stop smoking services.
- Trying to get a more accurate picture of the number pregnant women smoking by asking them to participate in a carbon monoxide (CO) test to assess their smoking status although recognizing this is not a completely reliable test as the CO can very quickly disappear from expired breath so low levels of smoking may not get picked up.
- Encouraging all professionals from the statutory or voluntary sector who may consult with pregnant women who smoke, to take the opportunity to refer them to the NHS stop smoking services.
- Ensuring that the stop smoking service follows-up all referred women who are pregnant by telephone or attempt to visit those who are not on the telephone.
- The local stop smoking service offering initial and on going support using a client centred approach tailoring interventions to meet the needs of the local women referred.
- Offering Nicotine Replacement Treatment, although there is no definitive evidence, on the effectiveness in helping women to stop smoking during pregnancy, it can be offered with advice if the woman wishes to receive this support.
- NHS stop smoking services should also support the partner of the pregnant woman, if they smoke and are interested in quitting.
- Providing comprehensive training to all midwives on this issue with a more in-depth training programme for midwives who will be delivering the intensive stop smoking interventions to local women.

¹⁴ NICE PH Guidance 26

• What is being done locally to address this issue?

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. The target is a 1% reduction each year in the number of pregnancy women who continue to smoke throughout their pregnancy. It also aims to contribute to a reduction in hospital admissions for children aged 0-4 with respiratory illness.

Every woman known to be smoking during their pregnancy is referred by the Maternity Unit to the specialist stop-smoking service. The Pregnancy & Early Years Stop Smoking Advisors role is to ensure all midwives receive training on the stop smoking programme, and that all women referred to the service are contacted and given clear information on the support available.

367 referrals were made to the stop smoking service in 2010/11¹⁵. 64.4% of these were represented by three groups. 36.3% were White British/Scottish/Welsh, 18.8% Bangladeshi, 9.3% Eastern European and other white European. The remainder included a wide number of ethnic groups and 22.3% were not stated. The Smoking in Pregnancy service has access to a team of advocates and multilingual support workers who are able to support pregnant women referred from the Bangladeshi community.

The stop-smoking service takes a client-centered approach, providing women with appropriate support and advice to suit their individual situation. The Stop-Smoking Advisor is flexible in delivery of the service, such as location and the type of support offered, in order to reduce any barriers which could stop women taking up the support available..

Tailored training is provided for midwives, health visitors, children centre and other primary care staff, to increase their knowledge and skills to also support clients with smoke cessation. Training has now also been added to the induction package for all new midwives.

The Stop Smoking advisor is working with the local tobacco alliance to promote smoke free homes, cars and families, raising the awareness of the dangers of passive smoking.

The Stop-Smoking Advisor is also responsible for ensuring that the quality of recorded data on smoking amongst pregnant women is improved and that the service is effectively monitored and evaluated. Regular data is provided to Public Health, who work closely with the central Tower Hamlets Stop Smoking Team.

¹⁵ Smoking cessation in pregnancy service quarterly reports

• What evidence is there that we are making a difference?

Nationally there has been an increasing trend in the number of pregnant women setting a quit date each year¹⁶ although the percentage of women successfully quitting has fluctuated with 35% in 2008/09, 23% in 2009/10 and 35% quarters 1 to 3 2010/11. Self reported data for women quitting smoking has been confirmed by carbon monoxide (CO) validation (93% in 2008/09 and 100% in 2009/10).

The percentage of women recorded as smoking at time of delivery in Tower Hamlets has reduced from 6.6% in Q1 2009/10¹⁷ to 3.3% in Q4 2010/11¹⁸. In Q1 2009/10 the London average was 7.3% and England average 14.0%.

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

Nationally, around two-thirds of adult smokers want to stop smoking and three-quarters report having attempted to quit at some point in the past¹⁹. Latest data from the Smoking Toolkit Study²⁰, however, shows that the vast majority of smokers attempting to stop are continuing to choose the least effective methods of doing so, 18.6% opting to stop unaided (the least effective method) in comparison to just under 9%²¹ using a stop smoking service (the most effective method).²²

Nationally, 87% of mothers who were smoking before or during their pregnancy reported that they received some kind of advice or information about their smoking²³.

Limited information is available regarding what women think about the stop-smoking services locally although patient satisfaction surveys are to be implemented by the Stop-Smoking advisor quarterly in 2011/12.

• What more do we need to know?

- A more accurate picture of the numbers and demographics of local women who are smoking during pregnancy. Identification of which of the stop smoking strategies used by the specialist clinic are obtaining the best outcomes.
- Feedback from users on their experience of the stop-smoking service to improve our understanding of what has motivated, and enabled, women to quit smoking in their pregnancy and what prevented women from being able to stop smoking in their pregnancy.
- The numbers of pregnant women who are smoking, with partners who smoke and what success is achieved with this group of smokers in referral and quit rates.
- How many of the women who do quit through pregnancy are still not smoking 6mths / 1 yr after delivery.
- The best options to address the challenges of implementing an effective Smoke Free Homes and cars programme in Tower Hamlets.

¹⁶ Department of Health, NHS IC Omnibus, 2009

¹⁷ Department of Health, NHS IC Omnibus, 2009

¹⁸ BLT maternity data

¹⁹ Office for National Statistics (2010) Smoking and drinking among adults, 2008. ONS

²⁰ Smoking Toolkit Study, www.smokinginengland.info

²¹ NHS IC (2010) Statistics on NHS Stop Smoking Services: England, April 2009 to March 2010. NHS IC www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services/statistics-on-nhs-stop-smoking-services-england-april-2009--march-2010

²² Local Stop Smoking Services: Service delivery and monitoring guidance 2011/12

²³ NICE PH Guidance 26

• What are the priorities for improvement over the next 5 years?

Key findings from this report:

- Supporting antenatal women to stop smoking is extremely important to prevent a range of serious pregnancy-health related problems from miscarriage to the unexpected death of an infant.
- Whilst the overall prevalence of women smoking during pregnancy is low compared to both the London and England average, white women are overly represented and there is concern about increasing rates in Bangladeshi women.
- Further insight is required regarding what prevents women from stopping smoking during their pregnancy, particularly amongst high risk groups.

Recommendations:

- Improved data to identify the demographic characteristics of the cohort of women who are smoking during pregnancy and the success rates of the maternity stop smoking service.
- Targeted strategies to support the small percentage of women in Tower Hamlets who continue to smoke during their pregnancy.
- Ensuring all professionals from all agencies across the borough are well-informed about the Maternity Stop-Smoking Service and are raising the issue at every opportunity.
- As part of the continued implementation of the Family Wellbeing Model, to ensure information about the service is easily available on the London Borough of Tower Hamlets Family Services Directory²⁴, and staff from any agency are able to refer directly.
- Continue to work to increase the referral rates from a wide range of front line agencies working with women in the antenatal and postnatal period.
- Continue work with the tobacco alliance to implement an effective Smoke Free Homes and cars programme in Tower Hamlets.

• Key Contacts

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Further Information

NICE public health guidance 26. How to stop smoking in pregnancy and following childbirth. 2010
www.nice.org.uk/guidance/PH26

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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>e.g. Director or Associate Director</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>				

²⁴ http://www.towerhamlets.gov.uk/lgsi/851-900/888_early_years_and_childcare/family_information_service.aspx