

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

# PUBLIC HEALTH GUIDANCE

## DRAFT SCOPE

### 1 Guidance title

How to stop smoking in pregnancy and following childbirth.

#### 1.1 Short title

Quitting smoking in pregnancy and following childbirth.

### 2 Background

- a) The National Institute for Health and Clinical Excellence (NICE) has been asked by the Department of Health (DH) to develop guidance on a public health intervention aimed at stopping smoking in pregnancy and following childbirth.
- b) NICE public health guidance supports the preventive aspects of relevant national service frameworks (NSFs), where they exist. If it is published after an NSF has been issued, the guidance effectively updates it. Specifically, in this case, the guidance will support the NSF on children, young people and maternity services (DH 2004a).
- c) This guidance will support a number of related policy documents including:
  - 'Cancer reform strategy' (DH 2007a)
  - 'Choosing health: making healthy choices easier' (DH 2004b)
  - 'Every child matters: change for children' (HM Government 2004)
  - 'Health inequalities: progress and next steps' (DH 2008a)
  - 'High quality care for all – NHS next stage review. Final report' (DH 2008b)

- 'Implementation plan for reducing health inequalities in infant mortality: a good practice guide' (DH 2007b)
- 'Maternity matters: choice, access and continuity of care in a safe service' (DH 2007c)
- 'National stroke strategy' (DH 2007d)
- 'Operational plans 2008/09–2010/11. National planning guidance and "vital signs"' (DH 2008c)
- 'Review of the health inequalities infant mortality PSA target' (DH 2007e)
- 'Smoking kills' (DH 1998)
- 'Tackling health inequalities – a programme for action' (DH 2003)
- 'Teenage parents next steps: guidance for local authorities and primary care trusts' (DH and Department for Children, Schools and Families 2007)
- 'The child health promotion programme. Pregnancy and the first five years of life' (DH 2008d).

This guidance will provide recommendations for good practice, based on the best available evidence of effectiveness, including cost effectiveness. It is aimed at professionals, commissioners and managers with public health as part of their remit working within the NHS, local authorities and the wider public, private, voluntary and community sectors. It is particularly aimed at midwives, health visitors, general practitioners and antenatal care services. It is also aimed at women who are pregnant or who have an infant aged up to 12 months, as well as their partners and families.

This guidance will be developed using the NICE public health intervention process.

### **3 The need for guidance**

- a) Smoking during pregnancy can cause serious problems including complications during labour and increased risk of miscarriage, premature birth, still birth and sudden unexpected death in infancy

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(Royal College of Physicians 1992). It is estimated to increase infant mortality by about 40% (DH 2007e).

- b) In 2005, nearly a third (32%) of mothers in England smoked before pregnancy; nearly half (49%) gave up at some stage before the birth (British Market Research Bureau 2007). Although most of those who had quit before or during pregnancy were still not smoking after birth, three in 10 mothers (30%) were smoking again less than a year after the birth (British Market Research Bureau 2007). Other research (including studies which biochemically validated smoking status), suggest the scale of the problem may be even greater (French et al. 2007; Lawrence et al. 2005; Owen and McNeill 2001).
- c) Smoking during pregnancy is strongly associated with a number of sociodemographic and behavioural factors including age and social class. Mothers aged 20 or under are five times more likely than those aged 35 and over to have smoked throughout pregnancy (45% and 9% respectively) (British Market Research Bureau 2007). Mothers in routine and manual occupations are more than four times as likely to smoke throughout pregnancy –compared to those in managerial and professional occupations (29% and 7% respectively) (British Market Research Bureau 2007). Pregnant women are also more likely to smoke if they are less educated, live in rented accommodation and are single or have a partner who smokes. When the factors are combined to measure the cumulative effects of disadvantage, the number who continue to smoke during pregnancy increases tenfold from the least to the most deprived group (Penn and Owen 2002).
- d) Around one in ten mothers who smoke during pregnancy (11%) cut down, 5% try to give up but start again before the birth (British Market Research Bureau 2007). Women may report lower consumption when booking for maternity care than prior to pregnancy or from mid-pregnancy onwards. However, cotinine data

imply their intake of toxins does not change through pregnancy (Lawrence et al. 2003). NHS smoking cessation services report difficulty in achieving successful quit rates with pregnant women who smoke and doubt the effectiveness of brief interventions alone. The extent to which stop smoking support is provided following pregnancy is unclear.

- e) Almost half of all children in the UK are exposed to tobacco smoke at home (Jarvis et al. 2000). Infants of parents who smoke are more likely to suffer from serious respiratory infections (such as bronchitis and pneumonia), symptoms of asthma and problems of the ear, nose and throat (including glue ear). This includes infants who were born prematurely and those who have other underlying medical conditions.
- f) In 2005, almost four in ten mothers in England (38%) lived in a household where at least one person smoked during their pregnancy (British Market Research Bureau 2007). In most cases the person who smoked was the mother's partner. A sizeable minority of those who smoked did try to give up after the woman gave birth. Fifteen per cent who smoked during the pregnancy were not smoking when the baby was aged 4–10 weeks; this had risen to almost a quarter (24%) when the baby was aged 4–6 and 8–10 months (British Market Research Bureau 2007).
- g) Almost nine in ten mothers (87%) who were smoking before or during their pregnancy said they received some type of advice or information about the habit. Mothers who were only advised to give up were much more likely to have quit compared with those who were advised to cut down (36% and 8% respectively). Mothers who were only advised to cut down were more likely to take this option (69%) rather than quit (less than 1%). Mothers who received mixed messages (to stop completely and cut down) were much more likely to have cut down rather than give up completely (58% and 14% respectively) (British Market Research Bureau 2007).

## 4 The guidance

Public health guidance will be developed according to NICE processes and methods. For details see section 5.

This document defines exactly what this guidance will (and will not) examine, and what the guidance developers will consider. The scope is based on a referral from the DH (see appendix A).

### 4.1 *Who is the focus?*

#### 4.1.1 Groups that will be covered

This guidance will consider all women who smoke who:

- are planning a pregnancy
- are pregnant (from conception to birth)
- have an infant aged less than 12 months.

It will also consider all women who stop smoking immediately prior to or during their pregnancy.

To address health inequalities, particular emphasis will be given to pregnant women (and women who have recently given birth) from groups where smoking rates are high. This includes those who are:

- aged 20 or younger
- in routine and manual occupations
- lone parents
- unemployed (or with a partner who is unemployed)
- from a black or minority ethnic group
- looked after in a care setting
- refugees and asylum seekers.

The guidance will also consider anyone who smokes and lives in the same dwelling as a woman who is pregnant, planning a pregnancy or has an infant aged less than 12 months (regardless of whether or not the woman smokes).

#### **4.1.2 Groups that will not be covered**

- Women living in a smokefree household who are pregnant, planning a pregnancy or have an infant aged less than 12 months.
- Women who smoke who are not planning a pregnancy, are not pregnant or have not given birth within the past 12 months. Note: women with an unplanned pregnancy will be covered by this guidance once they become pregnant.

### **4.2 Activities**

#### **4.2.1 Activities/measures that will be covered**

- Interventions aimed at encouraging women to quit smoking if they are pregnant, planning a pregnancy or who have recently given birth.
- Interventions aimed at preventing women who have quit smoking to take up the habit again, if they had quit immediately before, during or after pregnancy.
- Interventions to help the partners of women who are pregnant, planning a pregnancy or who have recently given birth support the woman in her attempts to quit smoking. (Partners includes 'significant others'.)
- Interventions to help the partners themselves (and 'significant others') to quit smoking.
- Interventions to eliminate fetal and infant exposure to tobacco smoke in the home.
- Interventions which address the barriers people face when trying to access stop-smoking support immediately before and during pregnancy and following childbirth.
- Interventions to help pregnant women (or women who have recently given birth) cut down on the number of cigarettes they smoke.

Reasonable steps will be taken to identify ineffective measures and approaches.

#### **4.2.2 Activities/measures that will not be covered**

- Activities and interventions not aimed at helping women to quit smoking during pregnancy and following childbirth.
- The use of pharmacotherapies if they are not licensed for pregnant or breastfeeding women (for example, bupropion and varenicline).

#### **4.3 Key questions and outcomes**

Below are the overarching questions that will be addressed along with some of the outcomes that would be considered as evidence of effectiveness.

**Question:** Which interventions are effective and cost effective in helping women to quit smoking immediately before or during pregnancy and following childbirth?

##### **Expected outcomes:**

- Reduction in the number of women who smoke before, during or after pregnancy.
- Increase in the number of them who quit smoking.
- Reduction in the number of them who start smoking again during and after pregnancy.
- Increase in the number of them who quit rather than cut down on cigarettes during pregnancy.
- Positive changes in their knowledge and attitudes regarding smoking – before, during and after pregnancy.
- Reduction in infant mortality and morbidity (such as):
  - a reduction in the number of low birthweight babies
  - a reduction in the number of infant respiratory infections.

**Question:** Which interventions are effective and cost effective in encouraging partners (and ‘significant others’) help a woman quit smoking during her pregnancy and following childbirth?

**Expected outcomes:**

- Increased support provided to the pregnant woman by their partner (and 'significant others') to encourage the woman to quit smoking.
- Increased support to help partners (and 'significant others') encourage their pregnant partner who smokes to quit.
- Reduction in smoking prevalence among pregnant women and their partners.
- Increase in the number of partners (and 'significant others') quitting smoking.
- Positive changes in the partners' knowledge and attitudes regarding smoking before, during and after the pregnancy.
- Reduction in infant mortality and morbidity (such as):
  - a reduction in the number of low birthweight babies
  - a reduction in the number of infant respiratory infections.

**Question:** Which interventions are effective and cost effective in preventing women who have quit smoking to take up the habit again during pregnancy and following childbirth?

**Expected outcome:**

Reduction in the number of women who start smoking again during or after pregnancy.

**Question:** Which interventions are effective and cost effective in encouraging partners (and significant others) who smoke to stop smoking themselves?

**Expected outcomes:**

- Reduction in the smoking prevalence of the partners (and 'significant others') of women who are planning to be or who are pregnant or have an infant under the age of 12 months.
- Increase in the number of them who stop smoking.
- Positive changes in their smoking-related knowledge, attitudes and behaviour.
- Reduction in infant mortality and morbidity (such as):

- reduction in number of low birthweight babies
- reduction in number of infant respiratory infections.

**Question:** Which interventions are effective and cost effective in encouraging the establishment of smokefree homes?

**Expected outcomes:**

- Elimination of exposure to tobacco smoke in the home.
- Reduction in exposure to tobacco smoke in the home.
- Reduction in the incidence of smoking in the presence of children.

**Question:** What factors aid delivery of effective interventions? What are the barriers to successful delivery?

**Expected outcomes:**

Improvements in the accessibility and acceptability of stop-smoking interventions to: women who are pregnant, planning a pregnancy or who have recently given birth, their partners and families. Variables (such as socioeconomic status) will also be considered.

**Question:** What are the health consequences of pregnant women cutting down on their cigarette consumption as opposed to quitting?

**Expected outcomes:**

- Biochemical measures of smoke intake.
- Indicators of compensatory smoking behaviour.
- Links between smoke intake and smoking-related illnesses.

#### **4.4      *Status of this document***

This is the draft scope, released for consultation on 23 January 2009 until 20 February 2009, to be discussed at a public meeting on 4 February 2009. Following consultation, the final version of the scope will be available at the NICE website in April 2009.

## 5 Further information

The public health guidance development process and methods are described in 'Methods for development of NICE public health guidance' (NICE 2006) available at [www.nice.org.uk/phmethods](http://www.nice.org.uk/phmethods) and 'The public health guidance development process: An overview for stakeholders, including public health practitioners, policy makers and the public' (NICE 2006) available at [www.nice.org.uk/phprocess](http://www.nice.org.uk/phprocess)

## 6 Related NICE guidance

### ***Published***

Antenatal care: routine care for the healthy pregnant woman. NICE clinical guideline 62 (2008). Available from [www.nice.org.uk/CG6](http://www.nice.org.uk/CG6)

Smoking cessation services. NICE public health guidance 10 (2008).

Available from [www.nice.org.uk/PH10](http://www.nice.org.uk/PH10)

Behaviour change at population, community and individual levels. NICE public health guidance 6 (2007). Available from [www.nice.org.uk/PH6](http://www.nice.org.uk/PH6)

Workplace interventions to promote smoking cessation. NICE public health guidance 5 (2007). Available from [www.nice.org.uk/PH5](http://www.nice.org.uk/PH5)

Brief interventions and referral for smoking cessation in primary care and other settings. NICE public health guidance 1 (2006). Available from [www.nice.org.uk/PH1](http://www.nice.org.uk/PH1)

Postnatal care: routine postnatal care of women and their babies. NICE clinical guideline 37 (2006). Available from [www.nice.org.uk/CG37](http://www.nice.org.uk/CG37)

### ***Under development***

Weight management in pregnancy. NICE public health guidance (due January 2010).

Hypertension in pregnancy: the management of hypertensive disorders during pregnancy. NICE clinical guideline (due February 2010).

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School-based interventions to prevent smoking. NICE public health guidance (due February 2010).

Care of pregnant women with complex social factors. NICE clinical guideline (due June 2010).

## **Appendix A Referral from the Department of Health**

The Department of Health asked NICE:

‘To produce public health intervention guidance on smoking cessation in pregnancy and following childbirth’.

## Appendix B Potential considerations

It is anticipated that the Public Health Interventions Advisory Committee (PHIAC) will consider the following issues in relation to the interventions under examination:

- Target audience, actions taken and by whom, context, frequency and duration.
- Whether they are based on an underlying theory or conceptual model.
- Whether they are effective and cost effective (taking into account the reliability of self-report measures of smoking status).
- Critical elements, for example, whether effectiveness and cost effectiveness varies according to:
  - the diversity of the population (for example, in terms of the target audience's age, gender or ethnicity)
  - the status of the person delivering it and the way it is delivered
  - its frequency, length and duration, where it takes place and whether it is transferable to other settings
  - its intensity.
- Any trade-offs between equity and efficiency.
- Any factors that prevent – or support – effective implementation, including any adverse or unintended effects.
- Current practice.
- Availability and accessibility for different groups.

## Appendix C References

British Market Research Bureau (2007) Infant feeding survey 2005. A survey conducted on behalf of the Information Centre for Health and Social Care and the UK Health Departments. Southport: The Information Centre.

Department of Health and Department for Children, Schools and Families (2007) Teenage parents next steps: guidance for local authorities and primary care trusts. Nottingham: DCSF Publications.

Department of Health (1998) Smoking kills: a white paper on tobacco. London: The Stationery Office.

Department of Health (2003) Tackling health inequalities – a programme for action. London: Department of Health.

Department of Health (2004a) National service framework for children, young people and maternity services. Core standards. London: Department of Health.

Department of Health (2004b) Choosing health: making healthier choices easier. London: Department of Health.

Department of Health (2007a) Cancer reform strategy. London: Department of Health.

Department of Health (2007b) Implementation plan for reducing health inequalities in infant mortality: a good practice guide. London: Department of Health.

Department of Health (2007c) Maternity matters: choice, access and continuity of care in a safe service. London: Department of Health.

Department of Health (2007d) National stroke strategy. London: Department of Health.

Department of Health (2007e) Review of the health inequalities infant mortality PSA target. London: Department of Health.

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Department of Health (2008a) Health inequalities: progress and next steps. London: Department of Health.

Department of Health (2008b) High quality care for all – NHS next stage review. Final report. London: Department of Health.

Department of Health (2008c) Operational plans 2008/09–2010/11. National planning guidance and 'vital signs'. London: Department of Health.

Department of Health (2008d) The child health promotion programme. Pregnancy and the first five years of life. London: Department of Health.

French GM, Groner JA, Wewers ME et al. (2007) Staying smoke free: an intervention to prevent postpartum relapse. *Nicotine and Tobacco Research* 9: (6): 663–670.

HM Government (2004) Every child matters: change for children. London: Department for Education and Skills.

Jarvis MJ, Goddard E, Higgins V et al. (2000) Children's exposure to passive smoking in England since the 1980s: cotinine evidence from population surveys. *BMJ* 321: 343–5.

Lawrence T, Aveyard P, Croghan E (2003) What happens to women's self-reported cigarette consumption and urinary cotinine levels in pregnancy? *Addiction* 98: 1315–1320.

Lawrence T, Aveyard P, Cheng KK et al. (2005) Does stage-based smoking cessation advice in pregnancy result in long-term quitters? 18-month postpartum follow-up of a randomised controlled trial. *Addiction* 110: 107-116.

Owen L, McNeill A (2001) Saliva cotinine as an indicator of cigarette smoking among pregnant women. *Addiction* 96 (7): 1001–6.

Penn G, Owen L (2002) Factors associated with continued smoking during pregnancy: analysis of socio-demographic, pregnancy and smoking related factors. *Drug and Alcohol Review* 21: 17–25.

Royal College of Physicians (1992) Smoking and the young. London: Royal College of Physicians.