Consensus conference:
Pregnancy and Tobacco

7 & 8 October 2004
Lille (Grand Palais), France

RECOMMENDATIONS
(short version)

Foreword from Ann McNeill and Gay Sutherland
FOREWORD

We are delighted to be able to recommend this timely, authoritative, and extremely important work. Levels of smoking in pregnancy remain worryingly high, particularly among younger and more deprived women. Probably the single most important thing a pregnant smoker can do is to give up smoking. As this evidence-based booklet outlines, not only does smoking adversely affect the mother’s health, but also the health of the developing foetus and subsequently the health and behaviour of the child after birth. In addition smoking in pregnancy may affect future generations through the impact of smoking on genetic or reproductive systems in the foetus. This booklet also emphasises the established dangers of pregnant women breathing in other people’s smoke.

It is now established that cigarette smoking is a recognisable drug dependence and that nicotine delivered through cigarettes is highly addictive, to a degree similar to ‘hard’ drugs such as heroin or cocaine. Many smokers are therefore aware of the health risks, although they tend to underestimate them, but continue to smoke because they cannot stop. This is particularly so for pregnant women who smoke, most of whom will be aware that they may be harming their developing baby. It is therefore vital to be able to offer these women advice about stopping and sustained support should they decide to make a quit attempt. This booklet outlines how women can be advised and supported from before conception through to after delivery when unfortunately many women who manage to stop smoking during pregnancy, relapse.

The booklet also makes an important step forward in suggesting that for those pregnant women unable to stop either by themselves or with behavioural support, then NRT should be made available to them. NRT is a much less harmful means of delivering nicotine to the body without the 4000 plus smoke constituents that are inhaled in cigarette smoke, at least 40 of which are carcinogenic. Although there might be some potential risk to the developing foetus from nicotine per se, the overall health impact will be much less negative than if the mother smokes. This recommendation continues the enlightened approach that France has taken to nicotine regulation over recent years, being more progressive than most other countries in allowing NRT use to assist in temporary abstinence and for smoking reduction, as well as removing contraindications for the use of NRT by smokers with cardiovascular disease. This approach recognises that NRT is a much safer and slower method of delivering nicotine than smoking and gives smokers an informed choice about safer ways of taking nicotine for those unable to give it up abruptly.

Given the well documented dangers of smoking during pregnancy, and the very slow progress in reducing smoking prevalence in this population, there is still much research urgently needed in this area and we hope that the further research recommended in this report will be implemented.

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QUESTIONS ASKED

Question 1. What are the epidemiological data regarding maternal and paternal smoking?

Question 2. What are the consequences of smoking on pregnancy and delivery?

Question 3. How should we take care of female smokers?

Question 4. What are the short-, medium- and long-term consequences of smoking during pregnancy?

Question 5. How do we treat in utero tobacco exposure during the perinatal period?

Question 6. What public health measures should we propose or validate in order to reduce female smoking?

INTRODUCTION

This conference was organised and directed in compliance with the methodological rules recommended by Anaes (Agence nationale d’accréditation et d’évaluation en santé – National Agency of Health Accreditation and Assessment).

The conclusions and recommendations summarised in this document have been drafted by the Jury of the conference, in total independence. Anaes takes no responsibility whatsoever for their content.

It is estimated that 37% of women smoke before their pregnancy, and that 19.5% of pregnant women continue to smoke during all or part of this pregnancy. Passive smoking by pregnant women is not well quantified but remains frequent.

Smoking, as with all addictive behaviours, is an indicator of a multifarious (physical and/or psychological and/or social) suffering. It is a proven risk factor in female and/or male fertility disorders.

Maternal smoking during pregnancy increases the risk of occurrence of:

- pregnancy accidents such as abruptio placentae and placenta praevia,
- intra-uterine growth retardation,
- prematurity,
- sudden infant death,
- a higher overall consumption of healthcare during early childhood.

In addition to active smoking, passive smoking is also dangerous. Pregnant women can be exposed to others’ smoke in their personal environment (particularly if their partner smokes) as well as in their professional environment, and this exposure can occur before, during and after the pregnancy.

1. METHODS USED TO CARE FOR FEMALE SMOKING BEFORE, DURING AND IMMEDIATELY AFTER PREGNANCY

Cessation of tobacco use should preferably occur before conception, or as early as possible during pregnancy. But cessation remains useful at any time during the pregnancy, and even after delivery.
Total cessation is recommended, since merely decreasing the number of cigarettes the woman
smokes is not sufficient to prevent the occurrence of maternal, foetal or neonatal complications
during pregnancy or after delivery.

These objectives must be added to the general caring attitude towards the smoking woman, an
attitude of respect for her as a person which must never make her feel guilty about her smoking.

Health professionals must be trained to assist women in smoking cessation, more particularly
during pregnancy and after delivery.

1.1. Before pregnancy

The best way to prevent smoking during pregnancy is to prevent women from starting to smoke.
Priority must be given to awareness-raising actions during pre-adolescence and, most of all,
adolescence within the school, extracurricular and family environments by relying on the support of
all associative networks and on national health education bodies. The methodology shall take the
form of a partnership with youth in order to better involve them.

To help teenagers, it is important to change the image of the female smoker by increasing the
standing of the non-smoking woman’s image.
Information campaigns must be designed so as to counterbalance the manipulation of youth by the
tobacco industry, making use of all media and most specifically of those intended for young girls.

All medical appointments with teenagers must be used as opportunities to talk about their smoking
status and to emphasize the harmful effects of smoking.

1.2. During pregnancy

The occupational health doctors must commit themselves to enforcing the law which imposes
withdrawing a non-smoking pregnant woman from passive smoking exposure by offering her an
adjustment or change of her work position, or even, if this is not feasible, a work interruption. They
must offer pregnant women who smoke some kind of assistance in smoking cessation. Since the
Public health law of 9 August 2004, cases may be referred to the labour inspectors who have the
right to intervene. The document specifically intended for the occupational health doctor inside the
maternity booklet must be completed.

All maternity homes or departments shall be strictly non-smoking environments.

A prenatal interview with a health professional, for instance a midwife, must be extended to all
women during the first quarter of pregnancy. This exhaustive interview shall cover the daily
environment of the pregnant woman, ask about all risk factors during pregnancy and more
particularly about addictive behaviors and the problems they cause during pregnancy, and
propose a practical solution to assist in smoking cessation, tailored to each case. A specific
payment must be defined for such interviews.

The fact that a pregnant woman smokes (actively or passively) must be mentioned in the maternity
booklet.

The degree of tobacco exposure shall be assessed by measuring the carbon monoxide (CO) content
of the air expired by the person. The CO analyser is an easy-to-use tool during any pre- or post-natal
interview. It may promote the health professional’s and the pregnant woman’s desire to achieve
smoking cessation and reinforce their motivation during the actual smoking cessation period.

The psychological and behavioural approaches have a primary role to play at the various stages of
the care given to a smoking pregnant woman.

If the pregnant woman is not able to stop within a short time, by herself or with the help of
psychological and behavioral assistance, this indicates more severe tobacco addiction. In this
case, the use of nicotine replacement therapy (NRT) may facilitate the pregnant woman’s
smoking cessation attempt. An NRT may be prescribed at any point during the care of a pregnant
woman who smokes.
Bupropion is currently not recommended as an aid to smoking cessation for pregnant women.

### 1.3. Upon delivery

During the perinatal care period, it is important, beyond the well-documented therapeutics of maternal and neonatal complications related to smoking, to identify those women who continued to smoke up to the delivery and after it, but without making them feel guilty.

When a woman who has continued to smoke during pregnancy arrives at the maternity home or department, a measurement of her CO may enable the healthcare professionals looking after her at this time to be vigilant regarding the early diagnosis, prevention or treatment of maternal and/or neonatal complications.

### 1.4. After delivery

The healthcare professionals looking after the pregnant woman at the time of the birth must be confident of their role in:

- promoting breastfeeding in all cases, even for mothers who smoke or use NRT;
- convincing these mothers of their mothering capabilities;
- informing about the aids to smoking cessation for the mother, but also for the father, if he smokes;
- triggering after the delivery a smoking cessation attempt for the young mother, but also for the father, in order to avoid exposing the new-born baby to passive smoking.

The psychological and behavioural approaches have a primary role to play after the delivery to help the mother, and also the father, to stop smoking.

NRT may be prescribed during the postpartum and the breastfeeding period. Bupropion is currently not recommended as an aid to smoking cessation for breastfeeding women.

Special attention must be paid to young mothers who have stopped smoking just before or during pregnancy. They must be specifically assisted in order to avoid resumption of smoking after the delivery.

The child's environment must be free from any tobacco smoke pollution, both at home and in all the places (s)he frequents.

In addition to the other recommendations regarding the prevention of sudden infant death, it is all the more necessary to forbid parents from sharing their bed with their child since the risk is increased if the mother and/or the father smoke(s).

### 2. PROPOSALS FOR FURTHER STUDIES

Additional studies are required regarding 'Smoking and Pregnancy'. More particularly, it is recommended to carry out:

- a national survey in order to assess, by means of a biological marker, the importance of active and passive smoking in France for pregnant women and their environment;
- local surveys which could be used as indicators to adapt the answers to a specific problem;
- additional research on smoking markers in order to individually tailor NRTs for pregnant or breastfeeding women;
- specific research on smoking cessation aids for teenagers, in particular when smoking is related to the other addictive behaviours;
- studies on the impact of NRTs on the foetus. The creation of a register common to all practitioners using smoking cessation medicines with pregnant women could enable the sharing of data during and after the pregnancy;
- studies investigating the medium- and long-term risks for adolescents who have suffered from in utero tobacco exposure due to maternal smoking (e.g. cancers,
congenital malformations, obesity, syndrome X, psychomotor development, 
behavioural disorders, tobacco dependence or other addictions) ;
• a national register of foetal malformations which would include information regarding 
tobacco, alcohol and cannabis use.

Finally, given the lack of data, the absence of co-ordination of the various actions and the 
scattering of means, it would be desirable to establish a National Office on Pregnancy and Birth.

3. RECOMMENDATIONS REGARDING PUBLIC HEALTH MEASURES

3.1. General prevention measures

The smoking status of a person should be recorded in his or her medical record.

It is necessary to mention the baby's exposure to family smoking in the 8th day certificate and in the 
2 other compulsory certificates (9th and 24th months).

The fight against passive smoking exposure for pregnant women and children must be the 
subject of information campaigns. More specifically, it is necessary to regularly carry out 
information campaigns on the role of smoking in the occurrence of sudden infant deaths.

Consideration should be given to the appropriateness of adding to the smoking signs provided for 
by the Evin law, in premises open to the general public, and in particular the restaurants, bars and 
pubs, a special warning such as: 'Smoking area not recommended for pregnant women and young 
children'.

The sale of herbal cigarettes must be banned since their combustion supplies a high quantity of 
CO.

3.2. Measures to support pregnant women who smoke

It is necessary to provide the smoking pregnant woman and her partner with a local solution, by 
establishing multidisciplinary consultation centres for smoking cessation, if possible within 
maternity homes or departments. These centres shall give the smokers the possibility of speaking 
to, at the very least, a smoking cessation specialist, a dietician and a psychologist. Access to these 
centres shall be free of charge.

It is recommended that pregnant women who smoke should not have to pay for NRT.

3.3. Measures regarding health professionals

Health professionals must be aware of the example they give regarding smoking.

It is necessary to include a smoking cessation module in both the initial and the vocational training 
of all health and education professionals who are likely to come in contact with pregnant women 
and their children.

Child minders must be informed of the possible detrimental effects of active and passive smoking 
on the children they are caring for. Their smoking status must be taken into account when 
assessing their accreditation.

The full version of the recommendations may be obtained upon written request from:

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