

# Factsheet

## Nicotine Replacement Therapy in pregnancy

### Purpose of the fact sheet

This fact sheet has been developed by the Centre for Population Health within the NSW Ministry of Health, in consultation with NSW Kids and Families. It aims to provide evidence-based guidance to Local Health Districts (LHD) and other health professionals with regard to the use of Nicotine Replacement Therapy (NRT) in pregnancy. It has been informed by a review of the literature including information from the Cochrane Collaboration, the Therapeutic Guidelines and the Royal Australian College of General Practitioners.

### **Key messages:**

- 1. Smoking is the most important modifiable cause of adverse pregnancy outcomes**
- 2. Behavioural approaches to smoking cessation are safest, however, NRT should be recommended to pregnant women who are otherwise unable to quit**
- 3. Intermittent NRT and patches can be used in pregnancy, and are safer than continued smoking**

### NRT use in pregnancy

NRT has been shown to double smoking cessation rates among non-pregnant smokers (1). The use of NRT in pregnancy has been controversial because of concerns about effectiveness and safety. However, there is growing consensus among experts, and evidence, that NRT is much safer than continued smoking and offers an important opportunity to increase the likelihood of smoking cessation (2,3). Guidelines from the Royal Australian College of General Practitioners and the Therapeutic Guidelines now suggest NRT as a smoking cessation support in pregnancy (4,1).

NRT delivers lower levels of nicotine to the fetus than continued smoking (1, 5) and does not contain any of the other harmful chemicals in cigarette smoke. In addition, NRT has been shown to reduce smoking in pregnant women sufficiently to increase birth weight (6).

The lack of evidence for NRT use in pregnancy in a recent Cochrane review (7) is likely to be due to several factors including inadequate dosing due to the increased metabolism of nicotine and cotinine in pregnancy (8) and low adherence to therapy in some studies (9).

NRT should be recommended to all nicotine dependent pregnant women who have been unable to quit using non-pharmacological approaches. Intermittent NRT (gum, lozenge and inhalant) is preferred as it more closely mimics nicotine levels from smoking and delivers a lower overall dose (4). However, intermittent NRT may not be tolerated by some pregnant women as the higher peaks of nicotine may be associated with side effects such as gum and throat irritation (10) and worsening of pregnancy related nausea. For these women, transdermal patches should be recommended and used for 16 hours rather than 24 hours (1,4).

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## NRT use in breastfeeding women

Breastfeeding mothers who smoke should also be offered NRT (4). Nicotine levels in the infant from NRT use while breastfeeding are low and are unlikely to cause harm (11). Infant exposure can be further reduced by breastfeeding immediately before intermittent NRT use.

## The Quit for new life program

Quit for New Life is a smoking cessation support program for pregnant Aboriginal women and women who identify as having an Aboriginal baby. The program is an initiative of the Centre for Population Health, NSW Ministry of Health in partnership with NSW Kids and Families, and is being delivered through in Local Health Districts principally through Aboriginal Maternal and Infant Health Services (AMIHS) and Building Strong Foundations for Aboriginal Children, Families and Communities (BSF) programs. Smoking cessation care, including brief intervention, educational resources, Quitline referral, free NRT and extended follow-up care are offered to pregnant Aboriginal women who smoke and their household members who smoke. NRT will be provided either directly by the service or through a voucher system redeemable at local community-based pharmacies.

## References

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**For more information on the program or the use of NRT in pregnancy contact:**

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