NRT use in Pregnancy

Smoking in pregnancy is the most important preventable cause of a wide range of adverse pregnancy outcomes.1

Smoking causes obstetric and fetal complications and there is growing evidence of serious harm extending into childhood and even adulthood.2 Pregnancy is a window of opportunity for health professionals to help smokers quit.3

- Guidelines from the Royal Australian College of General Practitioners and the Therapeutic Guideline suggest the use of NRT as a smoking cessation support in pregnancy.4,5 NRT delivers lower levels of nicotine to the fetus than continued smoking without the other toxic compounds in tobacco smoke.6 Cigarette smoke is known to contain 7000 toxic chemicals including carbon monoxide which lowers oxygen availability to the fetus,7 and carcinogens that have been implicated in low birth weight.8 Many other toxic chemicals including cyanide, polycyclic aromatic hydrocarbons, benzene and heavy metals such as lead and cadmium which are in tobacco smoke cross the placenta.7 Available data and expert opinion suggest using NRT during pregnancy is less harmful than continuing to smoke.10,11,12,13

- Although nicotine is presumed to have some risk, clinical trials of therapeutic nicotine have not generally reported adverse fetal effects. There is no evidence of increased rates of miscarriage, stillbirth, premature birth, admissions to neonatal intensive care or neonatal health between NRT and control groups.14 While only modest cessation results have been achieved in studies using NRT in pregnancy, this may be a result of inadequate dosing, as nicotine clearance is increased by 60% in pregnancy15 and poor adherence.16

- NRT should be recommended to all nicotine dependent pregnant women who have been unable to quit using non-pharmacological approaches.17 Intermittent NRT (gum, lozenge, mouth spray and inhalator) is preferred to deliver a lower overall daily nicotine dose.18 However, intermittent NRT may not be tolerated by some pregnant women due to pregnancy related nausea. Intermittent NRT may also result in under-dosing and reduced effectiveness due to its low dose, insufficient physical support for high nicotine dependent women, and nicotine clearance levels are higher in pregnancy.19 Patches can be used and it is recommended that they be used for 16-hour rather than 24-hour period.20

Key messages

Smoking is the most important modifiable cause of adverse pregnancy outcomes

Behavioural approaches to smoking cessation are safest, however, NRT should be recommended to pregnant women who are otherwise unable to quit

Intermittent NRT and patches can be used in pregnancy and are safer than continued smoking

Pregnant women metabolise nicotine faster and need more NRT to reduce cravings and manage symptoms of nicotine dependence than they would in their non-pregnant state

7am to 10pm

Quitline® 13 7848
How to quit

Here are some useful tips to improve your chance of quitting and staying quit.

Support to quit smoking

Queensland’s Quitline service provides a free, confidential quit smoking support program, ‘Quit for You...Quit for Baby’ which is available for:

- Pregnant women who smoke
- Partners who smoke (regardless of whether the pregnant partner smokes or not)
- Women who are planning a pregnancy within the next six months

Participants receive tailored support over the phone (at a time that suits you), and free nicotine replacement patches, gum and lozenges.

Getting started is easy!

Call Quitline on 13 7848 - Quitline is available 7am to 10pm, 7 days a week.

Talk to your health professional – discuss quitting smoking with your GP, midwife, Obstetrician, pharmacist or community health worker.

Visit www.qld.gov.au/quithq

Note: the ‘Quit for You...Quit for Baby’ program is only available to Queensland residents.