

# Quit for new life

## Protocol for the provision of Nicotine Replacement Therapy

### 1. Purpose and intended audience

This protocol describes the procedure for the provision of Nicotine Replacement Therapy (NRT) to nicotine dependent antenatal and postnatal Aboriginal women and women<sup>1</sup> who identify as having an Aboriginal baby (and their cohabitants<sup>2</sup>) who are participating in the Quit for new life (QFNL) program.

The protocol is applicable to all participating Aboriginal Maternal and Infant Health Services (AMIHS) and Building Strong Foundations for Aboriginal Children, Families and Communities (BSF) programs and other antenatal and postnatal services that are implementing the QFNL program.

**The protocol is relevant to all health care staff involved in assessing and providing NRT to women and their cohabitants as part of the QFNL program.**

**The protocol provides guidance on who is eligible to assess and provide NRT to clients and cohabitants. Local Health Districts may draw on this guidance to develop their own approved NRT protocols / clinical guidelines.**

### 2. Rationale for offering NRT to pregnant women

Tobacco smoking is harmful to the fetus and the adverse effects of smoking during pregnancy are well documented. Smoking causes intrauterine growth restriction which has been attributed to reduced supply of oxygen and other essential nutrients to the fetus. Smoking in pregnancy can cause miscarriage, preterm birth, low birth weight and other labour complications. Preterm and low birth weight babies are more likely to be seriously unwell and are also more likely to experience chronic disease as adults.

The goal of smoking cessation in pregnancy is to be free of both tobacco and nicotine. However, many women are unable to quit tobacco smoking without assistance. For these women, NRT should be considered as it is likely to be much safer than continued smoking.

NRT is a pharmacological intervention for smoking cessation that delivers a dose of nicotine into the bloodstream which replaces the nicotine that is lost when a person stops smoking.

<sup>1</sup> The terms woman/women are used in this protocol to refer to pregnant and postnatal Aboriginal women and women who identify as having an Aboriginal baby who are participating in the Quit for new life program.

<sup>2</sup> The term cohabitant/s is used in this protocol to refer to household members who live with, or spend considerable time at the house of, the woman participating in the Quit for new life program.

The goal of NRT is to assist smoking cessation through reduction of nicotine withdrawal symptoms and cravings. The appropriate dose of NRT should reduce or stop withdrawal symptoms during the initial stages of quitting, thereby increasing the person's chances of staying quit. NRT should always be accompanied by behavioural strategies to increase the likelihood of quitting.

Nicotine is also present in the breast milk of women who smoke or use NRT. Nicotine is poorly absorbed in the baby's gastrointestinal tract and NRT is likely to be much less harmful for the baby than continued smoking.

### **3. Considerations regarding efficacy and safety of NRT for pregnant women**

The use of NRT (nicotine patch, gum, lozenge, mouth spray, strips and inhalator) during pregnancy has been controversial because of concerns about efficacy and safety. A recent Cochrane review determined that there is as yet insufficient evidence that NRT is effective or safe in pregnancy (Coleman et al 2012) but the review reported there were no statistically significant adverse fetal outcomes when comparing NRT to controls. Experts have concluded that NRT is generally safer than smoking in pregnancy.

The Guidelines used in Australia in relation to NRT in pregnancy (TGA Guidelines, RACGP Guidelines and Clinical Guidelines for the management of substance abuse during pregnancy) are consistent in their recommendations regarding NRT use in pregnancy and breastfeeding:

#### **Box A: Consensus position on use of NRT in pregnancy and breastfeeding**

- NRT can be offered at any stage of pregnancy (earlier the better) or in the postnatal period. NRT should be considered when a pregnant woman is nicotine dependent, otherwise unable to quit and when the benefits of cessation outweigh the risks of NRT and potential continued smoking.
- Intermittent-use NRT formulations (gum, lozenge, inhalator, mouth spray, strips) are preferred for pregnant and breastfeeding women because they provide smaller daily doses of nicotine than continuous-use formulations (transdermal patches).
- Patch can be used if oral is not tolerated or if more NRT is required to manage withdrawal symptoms and cravings (combination therapy). Pregnant women using transdermal patches should be instructed to remove patches at night to allow an eight hour break and apply a new patch in the morning.
- Risks and benefits of NRT should be explained carefully to the women and the clinician supervising the pregnancy should be consulted or informed.

NRT is classified as a Category D drug under the Australian (formerly ADEC) pregnancy categorisation. This is because it contains nicotine, like cigarettes, which can be associated with fetal harm. However, when used appropriately, NRT provides lower nicotine doses than cigarettes and NRT does not contain any of the other (7000+) harmful chemicals in cigarettes. For this reason, in 2007 the Therapeutic Goods Association (TGA) approved

changes in recommendations for the use of NRT in pregnancy from contraindication to precaution.

A NSW Health fact sheet on NRT in pregnancy has been developed to support the evidence-based position taken by NSW Health on the provision of NRT to pregnant women (**Appendix 1**).

#### 4. Assessing for nicotine dependence and inability to quit

NRT is indicated for clients (pregnant and postnatal women) and their cohabitant/s who are dependent on nicotine and are otherwise unable to quit.

**'Nicotine dependence'** is defined as those who have:

- their first cigarette within 30 minutes of waking; or
- >10 cigarettes per day

**'Unable to quit'** is defined as:

- repeated unsuccessful quit attempts in the past 12 months; or
- unable to remain quit for 2 weeks

#### 5. Contraindications and precautions

##### Contraindications

Few contraindications exist for the use of NRT. These include:

- 12 years old and under
- Hypersensitivity to nicotine or any other component of NRT. (Note: Client will only know this if they have tried NRT before and had a strong adverse reaction to it).

##### Precautions

Health workers should consult a Medical Officer **before** providing NRT to a client who has had a recent acute cardiovascular event such as myocardial infarction (heart attack), unstable or worsening angina, recent stroke or severe cardiac arrhythmia (irregular heartbeat).

In addition, specific forms of NRT should be avoided if the woman (or their cohabitant/s) has any of the following conditions:

- Dentures - avoid using gum
- Oral, oesophageal, pharyngeal or gastric inflammation - may be worsened by gum, lozenge and inhalator
- Asthma and chronic throat conditions - avoid inhalator
- Generalised skin disease -avoid patch
- Phenylketonuria -avoid lozenge as it contains aspartame

## 6. Adverse effects

Adverse effects of NRT are usually minor and transient and some may be related to stopping smoking rather than NRT. Careful assessment and monitoring is required to ensure that pregnancy complications are not causing these side effects.

Form of NRT	Possible side effect	Ways to deal with the side effect
Nicotine patches	Skin rashes where the patch is applied.  Sleep disturbance (can be due to caffeine toxicity, timing of the patch or nicotine withdrawal).  Neuralgia (uncommon).	Rotate the patch site and use hydrocortisone 1% cream for skin irritation.  Apply the patch in the morning rather than at night. Remove patch before sleep. Decrease caffeine intake especially in evening.  Change the patch location or reduce the strength of the patch.
Oral NRT products	Irritation of the mouth or throat, headaches, hiccups, indigestion, nausea, and coughing.	Check for correct use of the oral product or change to a different oral product.

## 7. Drug Interactions

No clinically relevant interactions between NRT and other drugs have been identified. However, smoking affects the body's metabolism of certain drugs and the dose of these drugs may need to be adjusted (usually lowered) by a Medical Officer on cessation of smoking. This is irrespective of NRT as it is other substances in cigarettes that affect drug levels. A list of drugs affected by smoking cessation can be found at **Appendix 2**:

Note that women and cohabitants should be advised that stopping smoking will increase their sensitivity to **caffeine** (coffee, tea, cola drinks and chocolate) and they should be advised to halve their usual intake when they stop smoking.

## 8. Who can assess and provide NRT to clients and cohabitants

While NRT is an unscheduled medicine and can be purchased over the counter in pharmacies and supermarkets, there is a duty of care involved when NRT is provided by a health care worker. This includes assessment of nicotine dependence, checking for contraindications and precautions and advising clients on how NRT works, the types available, and potential adverse effects. (See **Appendix 3**: Checklist for assessment and provision of NRT to clients).

The provision of NRT in a clinical setting is regarded as akin to the administration of medication and as such comes under the NSW Health Policy Standard '*Medication Handling in NSW Public Health Facilities: PD2013\_043*'. This is accessible from the NSW Health website at: [www0.health.nsw.gov.au/policies/pd/2013/PD2013\\_043.html](http://www0.health.nsw.gov.au/policies/pd/2013/PD2013_043.html)

The Medication Handling Policy states:

*‘Competency to administer medications is included in the qualifications of medical practitioners, nurse practitioners, midwife practitioners, registered nurses, registered midwives and enrolled nurses but only in accordance with any practice conditions imposed by the person’s place of employment and the endorsements, notations and conditions on the person’s registration.’*

To determine the eligibility of other staff to administer NRT, the Medication Handling Policy states:

*‘Other appropriately trained and accredited staff members may be authorised to administer certain medications and/or diagnostic agents within their context of practice at the particular facility in accordance with local protocols.’*

***LHDs are encouraged to develop local protocols in regard to provision of NRT to clients that would cover staff working with QFNL clients.***

For advice regarding the role of Aboriginal Health Workers in provision of NRT, refer to the *Decision Making Framework for Aboriginal Health Workers undertaking clinical activities in NSW Health* and *Guidelines for Aboriginal Health Workers in NSW Health* available from: [www.health.nsw.gov.au/workforce/aboriginal/Pages/Aboriginal-Health-Worker.aspx](http://www.health.nsw.gov.au/workforce/aboriginal/Pages/Aboriginal-Health-Worker.aspx)

## **9. Role of staff not authorised to provide NRT to clients**

Staff who are deemed by the LHD as not appropriate to assess a client’s requirements for NRT and/or to provide NRT directly to the client still have a role to play in the following ways:

### **Box B: Role of staff not authorised to provide NRT**

- Assess the client for nicotine dependence
- Explain NRT to clients - how it works, how it can help the client manage cravings and symptoms of nicotine withdrawal
- Assess for precautions and contraindications to NRT
- Discuss safety and efficacy of NRT use in pregnancy
- Run through the NRT products available – oral products and patch; how to use them – use samples or visuals and provide easy to read consumer information
- Emphasise the need to use enough NRT to manage symptoms and to use it for at least 8 weeks and preferably 12 weeks to maximise success with quitting.
- ***If using NRT vouchers*** provide a voucher and instruct the client to take it to a community pharmacy to redeem for NRT. Refer to Section 12.1 for more details.
- ***If NRT is provided directly by the LHD*** (not via vouchers), the staff member can do all of the above (except the voucher), document what was discussed with the client and refer the client to the staff member who is authorised within the service to provide the NRT products directly to the clients.

***All staff involved in the assessment and provision of NRT to clients/cohabitants need to be well trained in NRT and be able to provide safe and reliable information.***

## 10. Provision of NRT to QFNL pregnant / postnatal clients

### NRT in pregnancy and breastfeeding

Refer to the key consensus box on page 2 (Box A) and Box B on page 5 for guidance on provision of single form NRT to a pregnant/breastfeeding woman. Refer also to **Appendix 3: Checklist for assessment and provision of NRT to clients.**

### Combination therapy in pregnancy

If a pregnant woman has a moderate / high level of nicotine dependence she is likely to require combination NRT therapy (oral plus patch) to control her nicotine cravings and withdrawal symptoms. In some LHDs, the approval for combination therapy for a pregnant woman would be required from a medical officer. The local 'NRT in pregnancy protocol / clinical guideline' should outline the procedure to follow to provide combination therapy to a pregnant woman. If the QFNL NRT voucher system is being used, two separate vouchers should be given; one for each form of NRT being provided to the client.

### How much NRT to give

Each woman should be offered up to 12 weeks supply of NRT in total per quit attempt. If a woman requires 'combination therapy' this would be a 12 week supply of both forms of NRT. A woman may swap to a different form of NRT during the 12 week period. If a woman does not complete the 12 weeks of NRT and resumes smoking, she may be offered NRT again at a later stage when she is ready for another quit attempt.

A Guideline on the type of NRT products that can be offered, and the appropriate dose and use of these products is provided in **Appendix 4.**

### Documentation

Provision of NRT to clients should be recorded in the client's medical notes using either the QFNL Brief Intervention Form or other locally developed recording form.

The provision of NRT to pregnant clients (either an NRT voucher or direct provision) must be recorded in ObstetriX or eMaternity for those LHDs using this database or in CERNER for those using this database. Refer to the *Guide to Quit for new life data collection and performance monitoring* for more information on data monitoring required for QFNL.

## 11. Provision of NRT to cohabitants

All QFNL clients should be asked if there is anyone they live with (or someone who spends the majority of their time in the client's home) who smokes. Cohabitants who smoke, are nicotine dependent and are interested in quitting should be seen by the relevant health worker managing referrals for cohabitants and be offered a referral to Quitline and/or follow-up cessation support and up to 12 weeks supply of free NRT.

If a cohabitant has a moderate / high level of nicotine dependence he/she is likely to require combination NRT therapy (oral plus patch). If the LHD is using the NRT voucher system two separate vouchers need to be provided to the cohabitant – one for each form of NRT being provided.

Any NRT provided to a cohabitant needs to be clearly documented. This would be recorded in the cohabitant's medical record or treatment card if the person is a current/previous client of the health service. If the cohabitant has not attended the health service previously, the information can be recorded in a QFNL spread sheet or database set up for this purpose by the LHD. The agreed recording system must be reliable and easily accessible. The information recorded needs to include details of the type of support provided to the cohabitant.

The health worker assessing cohabitants for NRT and providing either the NRT voucher/s or direct supply must have appropriate qualifications and training as outlined in Section 8.

It is recommended that a letter noting that NRT has been provided is also sent to the cohabitant's general practitioner.

## 12. Options for NRT provision

There are three options available for the provision of NRT to clients/cohabitants as part of the QFNL program. Provision may be via:

- **NRT Voucher Scheme**, which has been established in partnership with the Pharmacy Guild of Australia, NSW Branch; or
- **Direct provision of NRT** by the Local Health District (LHD).
- **Combination of vouchers and direct supply of NRT**

### 12.1 NRT Voucher Scheme

If the LHD has chosen to provide NRT to QFNL clients through the voucher scheme, the health worker must complete the relevant sections of the NRT voucher (top box on the front side of the voucher) for clients or cohabitants who accept an offer of NRT (See **Appendix 5** for a copy of the NRT voucher).

If the midwife, child and family health nurse or other appropriate staff member has assessed the client/cohabitant for NRT and discussed/recommended a particular NRT product for that person (eg gum, lozenge, inhalator, mouth spray or patch), the staff member:

- ticks the box on the voucher that states, "*I have discussed NRT options with the client. The client prefers to use \_\_\_\_\_*".
- fill in type of NRT (not brand name) and dose of the NRT product being recommended.

Alternatively, the health worker can choose to tick the box on the voucher requesting that the '*pharmacist assess and if deemed suitable, provide the client with appropriate NRT*'. In this case, the health worker should still assess the client for nicotine dependence and provide the client with a voucher to take to the pharmacist.

**Note: It is best practice to provide only 2 – 4 weeks' worth of NRT on one voucher and then follow up with the client to check on usage of the NRT and adjust accordingly.**

Each voucher can be redeemed at any NSW community pharmacy for up to a 6 week supply of one of: gum, lozenge, inhalator, mouth spray or patch. Women and cohabitants should be followed-up regularly, usually every few days at the beginning of a quit attempt and then

every two weeks if possible. This could be by phone or in person. If the woman or cohabitant is not able to be seen regularly in person, the voucher can provide part or all of the 6 week supply by selecting the appropriate tick box on the voucher. In these cases, behavioural support should still be offered regularly by telephone.

## 12.2 Direct provision of NRT products

LHDs that have chosen to provide NRT products directly to women and cohabitants as part of the QFNL program will need to ensure that health workers administering NRT are appropriately qualified and trained (see Section 8 for details of who can assess and provide NRT) and adhere to this protocol and/or locally approved NRT protocols, policies or clinical guidelines.

As per the voucher system, it is preferable to only provide a small supply of NRT at each visit (eg 2-4 week supply) and ask the client/cohabitant to return for regular follow-up and to obtain more NRT.

### Basis of this protocol

- NSW Ministry of Health. Clinical Guidelines for the Management of Drug Use during Pregnancy, Birth and the Postnatal Period. North Sydney: NSW Ministry of Health; 2014. [www0.health.nsw.gov.au/policies/gl/2014/GL2014\\_022.html](http://www0.health.nsw.gov.au/policies/gl/2014/GL2014_022.html)
- NSW Ministry of Health: Managing nicotine dependence: a guide for NSW Health staff: Jan 2014: [www.health.nsw.gov.au/tobacco/Pages/managing-nicotine-dependence.aspx](http://www.health.nsw.gov.au/tobacco/Pages/managing-nicotine-dependence.aspx)
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- Ms Tracey Greenberg, Statewide Smoking Cessation Trainer
- Mr Charles Davidson and Ms Wendy Bryan-Clothier, Aboriginal Workforce Unit
- Mr Martin Power, Principal Pharmaceutical Officer, Pharmaceutical Services Unit, NSW Ministry of Health
- Dr Colin Mendelsohn, Vice President Australian Association of Smoking Cessation Professionals
- Dr John Wiggers, Senior Advisor to the Centre for Population Health

## 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.**
- 4. 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.**

### 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 is preferred as it more closely mimics nicotine levels from smoking and delivers a lower overall dose (4). However, intermittent NRT (gum, lozenge and inhalator) 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).

Pregnant women who have a moderate to high dependence on nicotine are likely to require combination therapy (oral + patch) to manage their cravings and withdrawal symptoms.

### **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 women having an Aboriginal baby. The program is an initiative of the NSW Ministry of Health in partnership with NSW Kids and Families, and is being delivered through Local Health Districts principally 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, Quitline referral, free NRT and extended follow-up care are offered to pregnant women having an Aboriginal baby who smoke and their household members. NRT is provided either directly by the service or through a voucher system redeemable at local community-based pharmacies.

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

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- Visit the Quit for new life page on NSW Health website: [www.health.nsw.gov.au/tobacco/Pages/quit-for-new-life.aspx](http://www.health.nsw.gov.au/tobacco/Pages/quit-for-new-life.aspx)
- Quitline: 13 7848 (13 Quit)

## Appendix 2: Drug interactions with smoking cessation

- Medication levels can vary if someone starts or stops smoking, or if they change how much they smoke.
- Cigarette smoking induces the activity of certain cytochrome P450 enzymes, particularly CYP1A2. These enzymes are involved in the metabolism of a number of medications.
- These effects are caused by components of tobacco smoke other than nicotine. Therefore **nicotine replacement therapy does not affect medication levels.**
- Decreased CYP1A2 activity after smoking cessation increases the risk of adverse drug reactions thus requiring adjustment to the dosage of some medications. CYP1A2 enzyme has a half-life of 36 hours, so dose adjustment to medications needs to be made within 2-3 days of smoking cessation.
- The change in metabolism/drug dose can occur with anyone who is reducing smoking. People considered light smokers may still need dose adjustment depending on the way they smoke (eg. compensatory smoking – inhaling more deeply).
- Predicting the required adjustment to medication can be challenging – the table below is a guide only. Therapeutic drug monitoring should be used where possible.

### Drugs affected by smoking cessation

Drug	Effect of smoking cessation	Impact on dosage required when client stops smoking	Clinical importance
Benzodiazepines	Possible increased sedation due to loss of CNS stimulation by nicotine.	May need lower dose. May be more sedated if dose remains the same	+
Beta blockers	Serum levels rise and effects enhanced.	May need lower dose.	+
Caffeine and alcohol	Caffeine levels rise Alcohol levels rise	Reduce caffeine and alcohol levels by half within a week	+++
Chlorpromazine	Serum levels rise	May need lower dose	+
Clopidogrel	Effectiveness is significantly reduced when smoker stops smoking	Prasugrel or ticagrelor may be better choices for non-smokers	+++
Clozapine	Serum levels rise significantly	An average 50% dose reduction may be required	+++
Flecainide	Serum levels rise	May need lower dose	+
Fluvoxamine	Serum levels rise	May need lower dose	++
Haloperidol	Serum levels rise	May need lower dose	+
Heparin	Serum levels rise	May need lower dose	+
Imipramine	Serum levels may rise – monitor for side effects	May need lower dose	+
Insulin	Increased subcutaneous absorption due to vasodilation after quitting	May need lower dose	++
Olanzapine	Serum levels rise significantly	An average 30% dose reduction may be required	+++
Theophylline	Serum levels rise	May need lower dose	++
Warfarin	Serum levels increase by 15% on average	May need lower dose. Close monitoring of INR advised.	+++

**Appendix 3: Checklist for assessment and provision of NRT to clients and cohabitants**

Action	Comments
1. Assess client for nicotine dependence and inability to quit	<p><b>Nicotine dependent</b> is first cigarette within 30 minutes of waking or &gt; 10 cigarettes per day</p> <p><b>Unable to quit</b> – repeated unsuccessful quit attempts in past 12 months or unable to remain quit for 2 weeks</p>
2. Check for contraindications and precautions	<p><b>Contraindications include:</b></p> <ul style="list-style-type: none"> <li>• 12 years and under</li> <li>• Hypersensitivity to nicotine or any other component of NRT</li> </ul> <p><b>Precautions include:</b></p> <p>Recent acute cardiovascular event such as myocardial infarction (heart attack), unstable or worsening angina, recent stroke or severe cardiac arrhythmia (irregular heartbeat).</p>
<p>3. Explain NRT</p> <ul style="list-style-type: none"> <li>✓ the goal of NRT</li> <li>✓ the risks of NRT</li> <li>✓ the risks of continued smoking</li> <li>✓ the benefits of NRT</li> </ul>	<p><b>Goal:</b> To assist with quitting by reducing nicotine withdrawal symptoms and cravings.</p> <p><b>Risks of NRT:</b> NRT contains nicotine which can be associated with fetal harm. However, there is increasing evidence that NRT is much safer than continued smoking as NRT delivers lower levels of nicotine to the fetus and doesn't contain any of the harmful chemicals in cigarettes.</p> <p><b>Risks of continued smoking:</b> Smoking causes an increased risk of range of obstetric complications including miscarriage, preterm birth and low birth weight babies (sickly and underweight babies) and difficult and complicated labour.</p> <p><b>Benefits of NRT:</b> NRT offers a better chance of quitting – It helps with cravings/withdrawal symptoms while you work on making changes to your habits and behaviours.</p>
4. Ask if client wants to try NRT in addition to behavioural support	<p>If <b>yes</b> – document and continue with checklist</p> <p>If <b>no</b> – document and provide ongoing behavioural support.</p>
5. Show client different NRT options ( samples or visuals) and explain how they work	<p>Go through different NRT options with the client. Discuss with client preferred option.</p> <ul style="list-style-type: none"> <li>- stress importance of taking enough to control cravings and withdrawal symptoms</li> <li>- explain that best results if taken for 12 weeks</li> </ul> <p>Provide voucher or direct supply – preferably for 2 weeks at first in case NRT is not right for client and different type of NRT is required.</p>

6. Troubleshoot if client has been using NRT and has had adverse reaction.	See table below:									
<table border="1"> <thead> <tr> <th data-bbox="188 412 379 479">Form of NRT</th> <th data-bbox="379 412 895 479">Possible side effect</th> <th data-bbox="895 412 1490 479">Ways to deal with the side effect</th> </tr> </thead> <tbody> <tr> <td data-bbox="188 479 379 819">Nicotine patches</td> <td data-bbox="379 479 895 819"> <p>Skin rashes where the patch is applied.</p> <p>Sleep disturbance (can be due to caffeine toxicity, timing of the patch or nicotine withdrawal).</p> <p>Neuralgia (uncommon).</p> </td> <td data-bbox="895 479 1490 819"> <p>Rotate the patch site and use hydrocortisone 1% cream for skin irritation.</p> <p>Apply the patch in the morning rather than at night. Remove patch before sleep. Decrease caffeine intake especially in evening.</p> <p>Change the patch location or reduce the strength of the patch.</p> </td> </tr> <tr> <td data-bbox="188 819 379 958">Oral NRT products</td> <td data-bbox="379 819 895 958">Irritation of the mouth or throat, headaches, hiccups, indigestion, nausea, and coughing.</td> <td data-bbox="895 819 1490 958">Check for correct use of the oral product or change to a different oral product.</td> </tr> </tbody> </table>		Form of NRT	Possible side effect	Ways to deal with the side effect	Nicotine patches	<p>Skin rashes where the patch is applied.</p> <p>Sleep disturbance (can be due to caffeine toxicity, timing of the patch or nicotine withdrawal).</p> <p>Neuralgia (uncommon).</p>	<p>Rotate the patch site and use hydrocortisone 1% cream for skin irritation.</p> <p>Apply the patch in the morning rather than at night. Remove patch before sleep. Decrease caffeine intake especially in evening.</p> <p>Change the patch location or reduce the strength of the patch.</p>	Oral NRT products	Irritation of the mouth or throat, headaches, hiccups, indigestion, nausea, and coughing.	Check for correct use of the oral product or change to a different oral product.
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7. Ask about medications.	<ul style="list-style-type: none"> <li>• Ask client about medications or check medical record.</li> <li>• Check to see if any meds interact with smoking cessation (Refer Appendix 2 for listing)</li> <li>• Refer to Medical Officer or GP to adjust medication if necessary</li> </ul>									
8. Ask about caffeine intake	Recommend client halves their usual caffeine intake (coffee, cola drinks, tea and chocolate) when they quit smoking.									
9. Provide NRT voucher or direct supply of NRT	<p><b>Vouchers</b></p> <ul style="list-style-type: none"> <li>✓ One type of NRT per voucher</li> <li>✓ Fill in 'Health worker to complete' box on voucher</li> <li>✓ Record in client notes</li> </ul> <p><b>Direct supply</b></p> <ul style="list-style-type: none"> <li>✓ Follow local protocol for provision of NRT to clients</li> <li>✓ Record in client notes</li> </ul>									
10. Ask about smoking habits of cohabitants	Ask the woman if her partner or anyone else she lives with smokes. If so, arrange for the relevant health worker to discuss quitting with the partner and/or household members and if clinically appropriate offer/provide free NRT.									

#### Appendix 4: Guidelines for dosage and use of NRT

NRT	Dosage	Directions for use
<b>Gum</b> (2 or 4mg)	Self-titrate dose according to withdrawal symptoms  When used as a single therapy: 8-12 gum/day but more if needed  Pregnant women will usually require 4mg gum	Chew slowly until a strong peppery taste and/or a tingling sensation is noticed. Flatten the gum and put back (park) between the gum and the cheek. Chew and park several times per piece. Repeat for 30 minutes and then throw away.  Gum should not be chewed like ordinary gum as it lowers its effectiveness.
<b>Lozenges</b> (2 or 4mg)	Self-titrate dose according to withdrawal symptoms.  When used as single therapy: 9-15 lozenges/day  Pregnant women will usually require 4mg lozenge	Suck lozenge – don't chew or swallow. Give 3 - 4 sucks to start releasing nicotine. Park on inside lining of the cheek. Continue to suck the lozenge 3-4 times every five minutes for up to 30 minutes at which time it should be completely dissolved.  Not suitable for people with phenylketonuria.
<b>Inhalator</b> (15mg cartridge)	Self-titrate dose according to withdrawal symptoms.  When used as single therapy: 3 - 6 cartridges/day	Puff lightly - do not inhale deeply to avoid coughing and irritation of the throat. Continue puffing for up to 20 minutes, break for 40 minutes, puff again 20 minutes.  Discard the cartridge after this time as the active ingredient is lost.
<b>Oral spray</b> (1 mg)	Self-titrate dose according to withdrawal symptoms.  When used as single therapy: 1-2 sprays every 30 minutes or up to 4 sprays per hour	Very fast acting and starts relieving cravings within 50 seconds with maximum effect at 10 minutes.  Always 'prime' the pump to ensure spray comes out as a fine mist not a squirt. Direct spray to inside of the cheek or under the tongue. Do not spray on the lips or directly onto the throat.  Not recommended for recovering alcoholic due to small amount of alcohol present.
<b>Patch</b>	21mg/24hr patch (removed at night) or 25mg/16 hour patch.  If body weight is less than 45kgs: offer oral NRT or medical officer may prescribe 14mg patch	Apply to non-hairy, clean, dry skin on the body and hold down for 10 seconds. Rotate to different parts of the body each time a new patch is used to avoid skin rash  Pregnant women should remove the patch before sleeping and apply a new patch in the morning.

#### Notes:

- **Avoid eating or drinking while using oral NRT products**
- **This is a guide only. It is always better to use more NRT to control urge to smoke than return to smoking.**

## Appendix 5: NRT Voucher

	<b>TAX INVOICE</b>	 The Pharmacy Guild of Australia
<b>Voucher for Nicotine Replacement Therapy Quit for new life Program</b>		
<p>The <i>Quit for new life</i> program is a NSW Health initiative supporting pregnant Aboriginal women (and their families) to quit smoking. Up to 12 weeks free supply of NRT is available to each woman and their household members (if clinically appropriate).</p>		
<b>Health worker to complete</b>		
Dear Pharmacist,		
_____ is receiving support to quit smoking as part of the <i>Quit for new life</i> Program.		
<input type="checkbox"/> Client is pregnant / breastfeeding    or <input type="checkbox"/> Client is in the postnatal period    or		
<input type="checkbox"/> Client is a cohabitant who lives with a pregnant / postnatal woman		
<i>I have recommended Nicotine Replacement Therapy (NRT) to assist with client/cohabitant's quitting.</i>		
<input type="checkbox"/> I have discussed NRT options with the client. The client prefers to use _____		
<input type="checkbox"/> Please assess and if deemed suitable, provide 2 weeks supply of appropriate NRT products.		
Redeem for: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 4 weeks <input type="checkbox"/> 6 weeks is the maximum on one voucher		
Health worker's name _____ Tel _____		
Job title _____ Local Health District _____		
Signature _____ Date _____		
Client Record Number or DOB _____ Previous voucher/s provided? Yes <input type="checkbox"/> No <input type="checkbox"/>		
<b>Pharmacist to complete</b>		
Pharmacy name _____		
ABN _____ EFT Details: BSB _____ / _____ Acc No. _____		
Email _____ Tel _____		
Address _____		
Date of issue of product _____ / _____ / _____		
Name, dosage and quantity of product supplied _____		
Total Retail Price (including GST) \$ _____		
Full name of client or agent: _____ Full name of Pharmacist: _____		
Signature of client or agent: _____ Signature of Pharmacist: _____		
<b>Give a copy of this form to the client and retain the original for your records</b>		
<b>Pharmacist: See overleaf for payment details and notes on NRT</b>		

## Appendix 5: NRT Voucher (reverse side)

### TAX INVOICE

#### Payment and contact details (for pharmacist)

##### To enable payment to pharmacist:

Please FAX the first page only of this form (not this page) within 5 days to:

**Pharmacy Guild of Australia, NSW Branch**

**Fax: 02 9467 7151** - Payment will be made by Electronic Funds Transfer (EFT)

**For enquiries about voucher payments:** Please call Janenne Wilson, the Health Services Manager, Pharmacy Guild of Australia, NSW Branch **Phone 9467 7140**

**For enquiries about the Quit for new life program:** Please contact the Statewide Coordinator, Rhonda Matthews on [rhonda.matthews@doh.health.nsw.gov.au](mailto:rhonda.matthews@doh.health.nsw.gov.au) or **Phone 9391 9951**

#### Notes on NRT for pregnant and breastfeeding women:

- NRT is recommended for nicotine dependent pregnant and breastfeeding women where the likelihood and benefit of quitting outweighs the potential harm of NRT and continued smoking.
- Intermittent NRT is preferred as it more closely mimics nicotine levels from smoking. However, where intermittent NRT is not tolerated, patches may be used (as per Therapeutic Guidelines: Psychotropic drug use in pregnancy: non-prescribed psychoactive drugs). Pregnant women need to be made aware of the need to remove patches at night to ensure the foetus is nicotine free for a minimum of 8 hours.
- Up to 6 weeks supply of NRT can be redeemed at the one time using one voucher. It is preferable for clients to receive only 2 - 4 weeks supply per voucher in case the client finds the product unsuitable.
- The lowest cost product should be supplied (unless the client has had a previous reaction to this product)

#### Guide for pharmacists on NRT dosages for pregnant women

NRT	Dosage	Directions for use	Quantity required to supply 2 weeks' worth of NRT product
Gum	When used as a single therapy: 8-12 gum/day  Pregnant women will usually require 4mg gum	Chew slowly until the taste becomes strong (~1 minute). Then rest or 'park' the softened gum against the side of the mouth /cheek. When the taste fades chew a few more times until taste gets stronger. Use for 20 to 30 minutes then discard.  Avoid eating or drinking for 15 mins before and after gum use.	12 boxes (12 per box) 6 boxes (24 per box) 5 boxes (30 per box) 2 boxes (96 per box)
Mini Lozenges and Lozenges	When used as single therapy: 9 -20 lozenges/day (dependent on mg/type)  Pregnant women will usually require 4mg lozenge	Suck lozenge 3-4 times to release nicotine then 'park' against inside lining of the cheek. Continue to 'suck and park' for up to 30 minutes or until lozenge has completely dissolved. The lozenge should not be chewed or swallowed.  No eating or drinking while lozenge is in the mouth.	Mini lozenge (4mg) Single Therapy: 15 per day = 11 x (20 lozenge) dispensers  Mini lozenge (1.5mg) Single Therapy: 20 per day = 14 x (20 lozenge) dispensers  Lozenge (4mg): Single Therapy: 15 per day = 6 boxes (36 per box) = 3 boxes (72 per box)  Cool Drops lozenges (4mg and 2mg) Single Therapy: 15 per day= 11 x (20 lozenge) dispensers
Inhalator	When used as single therapy: 3-6 cartridges/day	Insert cartridge into mouthpiece. Close device to puncture cartridge. Inhale gently through the mouthpiece and hold inhaled air in the mouth. Nicotine is only absorbed through oral mucosa.	5 boxes (20 cartridges per box)
Patch	10 or more cigs/day and more than 45kgs -provide 21mg/24hr patch (removed at night for pregnant women) or provide 25mg/16hr patch  If < 45kgs: offer inhalator, lozenge or gum. Medical Officers may prescribe 14mg patch to woman less than 45kgs.	Place patch on a clean, non-hairy site anywhere on the body. (Preferably upper arms, chest or upper back). A new patch should be placed on a different site each day to help prevent a skin reaction.  Pregnant women should always remove the patch before sleeping at night and apply a new patch in the morning.	2 boxes (7 patches per box) 1 box (14 patches per box)

#### Notes:

- Quit for new life clients are only eligible for one form of NRT per voucher. If combination therapy is deemed appropriate, the client can obtain patches on script from their GP through the PBS and use the QFNL voucher for the oral / intermittent NRT.
- This table is a guide only. It is important clients receive appropriate professional advice regarding dosage to control cravings and withdrawal symptoms; under-dosing is common. Clients are encouraged to self-titrate to manage their symptoms.

**Note: The mouth spray is not included in the table on the voucher as these were approved for inclusion in QFNL after the voucher was printed. If you want a client to receive the mouth spray please write it on the voucher.**