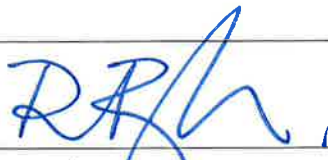





**Chronic Disease/Injury Prevention  
Quit Smoking Clinic Manual**

<b>Medical Directive and/or Delegation</b>	<b>Nicotine Replacement Therapy</b>	
<b>Approved:</b>	Rosemarie Ramsingh Medical Officer of Health	
	Joëlle Aubin Manager of Chronic Disease & Injury Prevention	
<b>Date:</b>	Original: 2007-03      Revised: 2012-01	

**ORDER AND/OR DELEGATED PROCEDURE:**

The *Medical Office of Health* at the *Porcupine Health Unit*, delegates the authority to Registered Nurses (RN) the act of dispensing Nicotine Replacement Therapy (NRT) under the following guidelines.

**RECIPIENT PATIENTS:**

Client populations eligible to receive NRT through this process are individuals over the age of 18 years, as well as adolescents and pregnant/breastfeeding women who have a medical note/order from a treating physician/nurse practitioner.

**AUTHORIZED IMPLEMENTERS:**

Registered Nurses working at the Porcupine Health Unit who have received the appropriate training. Appropriate training includes: Individuals who have received certification from Training Enhancement in Applied Cessation counseling and Health (TEACH) or the University of Massachusetts Smoking Cessation Program; Program Training and Consultation Centre (PTCC); and have successfully completed the "Smoking Cessation Clinic Authorization/Orientation Checklist" as per Policy D-I-1 Authorization of PHNs.

**INDICATIONS:**

Clients eligible to receive NRT under this delegation must meet the following requirements:

- Be currently registered and in regular attendance in a cessation program offered by the Porcupine Health Unit;
- Have developed a quit plan with the assistances of the RN/Smoking Cessation Specialist prior to starting the use of NRT;
- Have been fully informed about the proper usage of NRT;
- If the client is under the age of 18, pregnant/breastfeeding or recently had a myocardial infarction (MI)/cerebral vascular accident (CVA)/uncontrolled cardiac arrhythmia they must have a valid completed medical note from a treating physician/nurse practitioner that includes a recommendation for the use of NRT and includes appropriate dosage for this client. Notes will be valid for a maximum period of 6 months. See Appendix C.

**CONTRAINDICATIONS:**

Clients will not be eligible or will cease to receive NRT if they:

- Demonstrate any side effects of NRT listed on the product monograph;
- Cease to regularly attend their scheduled appointments with the RN/Smoking Cessation Specialist;
- Develop adverse effects of NRT;
- Fail to follow through with their commitments made in their quit plan;
- Instructions/communications from the treating physician/nurse practitioner indicating that NRT should be stopped; and/or
- Experienced a recent MI/CVA/cardiac arrhythmia/pregnancy unless NRT has been ordered by the client's treating physician/nurse practitioner.
- Are currently taking Zyban or Champix.

**CONSENT:**

Consent will be confirmed through the meeting of eligibility criteria listed above.

**GUIDELINES FOR IMPLEMENTING THE ORDER/PROCEDURE:**

Clients' who meet the eligibility requirements, are in compliance with the indications and have no contraindications as outlined above, will receive their NRT supply at the end of their smoking cessation program session in accordance with the attached *Porcupine Health Unit Guidelines for NRT distribution (Appendix A)*.

**DOCUMENTATION AND COMMUNICATION:**

The NRT dispensed will be documented on the *Assessment-Counseling Recording Form* and will include the client's name, the date the NRT was dispensed, the type and amount of NRT dispensed, the NRT lot number and expiry dates of the NRT product dispensed. Each entry is to be signed by the RN who has dispensed the product.

Any adverse effects experienced by the client will be documented and the client will cease to receive further NRT and will be referred to their treating physician/nurse practitioner for appropriate follow-up.

**REVIEW AND QUALITY MONITORING GUIDELINES:**

If an authorized RN identifies any issue related to using this directive they should consult the Chronic Disease & Injury Prevention Manager, Chronic Disease Prevention Coordinator or the Medical Officer of Health.

All RNs dispensing NRT will receive appropriate training such as PTCC, OTRU or TEACH; and be regulated under the Regulated Professionals Act.

**ADMINISTRATIVE APPROVALS (AS APPLICABLE):**

Medical Officer of Health  
Manager of Chronic Disease and Injury Prevention

**APPROVING PHYSICIAN(S)/AUTHORIZER(S):**

Dr. Rosemarie Ramsingh (Medical Officer of Health)  
Joëlle Aubin (Manager of Chronic Disease & Injury Prevention)

**REFERENCES:**

Dispensing of Nicotine Replacement Therapy Medical Directive adapted from Ottawa Public Health: December 1, 2009.

University of Ottawa Heart Institute Guidelines for Nicotine Replacement Therapy: May 11, 2005

CAMH Administration of Nicotine Replacement Medications by Registered Nurses: May 3, 2005

**APPENDIX ATTACHED:** Yes

**APPENDIX A  
PORCUPINE HEALTH UNIT  
GUIDELINES FOR NRT DISTRIBUTION**

**Nicotine Patch Method<sup>1</sup>**

Can be used alone or in combination with nicotine gum, lozenge or inhaler, as per the discretion of the RN based on Fagerstrom results and client need(s).

<b>Medication Dosage Nicotine Patch (mg/24hrs)</b>	<b>Indications</b>	<b>Contraindications / Cautions</b>	<b>Maximum Dose</b>
21 mg / 24h	Smoking > 15 cigarettes per day	Contact hypersensitivity to the patch. Signs and symptoms of these may include erythema, pruritis, edema, hives or generalized rash or urticaria.  * Pregnancy, recent CVA, immediate post MI, angina, life threatening arrhythmias.	** 35 mg /24h
14 mg / 24h	Smoking 7 to 14 cigarettes per day		
7 mg / 24h	Smoking less than 7 cigarettes per day or unable to tolerate higher doses of NRT		

\* Recent studies have shown that using NRT is safer than smoking. Any client who is pregnant or has a history of heart disease, recent CVA or MI (**within 2 weeks**)<sup>2</sup>, or any cardiac arrhythmia should speak to their health care practitioner on the merits of being initiated on NRT. The RN can then continue these clients on NRT and reduce dosages accordingly. Any increase in dosage should be done by the client's treating physician/nurse practitioner.

\*\* Clients can be titrated up to (and including) 35mg dosage by the RN in the Porcupine Health Unit Quit Smoking Clinic. This maximum dosage refers to the patch dosage only. If a client requires greater than 35mg in patch dose, they should be referred to their health care practitioner. Clients on the maximum patch dose can continue to use one other PRN NRT product (nicotine gum, lozenge or inhaler). See next page for maximums for combination therapy. If a client experiences nausea or vomiting, diaphoresis, tremors, confusion or weakness after using NRT, this could mean they are receiving too high a dose. Refer to Appendix B - *Decision Tree to Address Nicotine Withdrawal - Increasing dosage beyond 21 mg patch.*

**Note:** Reducing or titrating up dosages shall never be done by cutting a patch, or recommending such practice, to reach the therapeutic dose.

<sup>1</sup> CAMH. Medical Directive – *Administration of Nicotine Replacement Medications by Registered Nurses and Pharmacists in the Nicotine Dependence Clinic.*

<sup>2</sup> Department of Family and Community Medicine, University of Toronto. *Smoking Cessation Guidelines – How to treat your patient's tobacco addiction.* 2000.

**Tentative NRT Patch Schedule – subject to change based on client assessment**

<u>Step 1 Protocol</u>	<u>Step 2 Protocol</u>	<u>Step 3 Protocol</u>
21 mg daily X 6 weeks	14 mg daily X 6 weeks	7 mg daily X 6 weeks
14 mg (step 2) daily X 2 weeks	7 mg (step 3) daily X 4 weeks	
7 mg (step 3) daily X 2 weeks		
If within 48 hours of initial application, withdrawal or cravings persist, add Nicotine Patch 7 mg patch. May repeat to a <b>maximum of 35 mg.**</b>	If within 48 hours of initial application, withdrawal or cravings persist, increase to Nicotine Patch 21 mg, and follow step 1 protocol.	If within 48 hours of initial application, withdrawal or cravings persist, increase to Nicotine Patch 14 mg, and follow step 2 protocol.

**Combination Therapy<sup>3</sup>**

Add 1 other form of Nicotine Replacement Therapy to the Nicotine Patch to address cravings as necessary (select only 1). Refer to following page for contraindications of each product.

**Gum:** max 6 pieces / 24 hours

**OR**

**Inhaler:** max 6 cartridges / 24 hours

**OR**

**Lozenge:** max 6 lozenges / 24 hours

<sup>3</sup> CAMH Nicotine Replacement Therapy (NRT) Order Set. 2010-10-21 version.

<sup>4</sup> CAMH. Medical Directive – *Administration of Nicotine Replacement Medications by Registered Nurses and Pharmacists in the Nicotine Dependence Clinic.*

<sup>5</sup> Nicotine Replacement Therapy Product Monographs.

## Mono Therapy – PRN NRT (Used Alone)<sup>4</sup>

	Indications	Contraindications	Maximum Dose <sup>5</sup>
<b>Nicotine Gum</b>			
2 mg/piece q1hr PRN	<ul style="list-style-type: none"> <li>Does <u>not</u> smoke their first cigarette within the first 30 minutes of waking up.</li> <li>Willing to learn the proper technique.</li> </ul>	<ul style="list-style-type: none"> <li>Unable to chew gum</li> <li>Wears dentures</li> <li>Active TMJ dysfunctions</li> <li>Recent CVA; immediately post MI; angina; life threatening arrhythmias.</li> </ul>	Max 20 pieces of gum in 24hrs.
4 mg/piece q1hr PRN	<ul style="list-style-type: none"> <li>Smokes first cigarette within 30 minutes of waking up.</li> <li>Willing to learn the proper technique since the nicotine has to be absorbed across the buccal mucosa.</li> <li>Switch to 2 mg if client unable to tolerate (gum too strong, S/S of nicotine toxicity with 4 mg gum – nausea, diaphoresis, irritated).</li> </ul>		
<b>Nicotine Inhaler</b>			
10 mg cartridge (delivers 4mg nicotine) q1hr PRN	<ul style="list-style-type: none"> <li>For those who need to keep their hands occupied.</li> <li>Delivers 4 mg nicotine per cartridge.</li> </ul>	Recent CVA, immediate post MI, angina, life threatening arrhythmias.	Max 12 cartridges in 24hrs
<b>Nicotine Lozenge</b>			
2 mg/ q1hr PRN	<ul style="list-style-type: none"> <li>Does <u>not</u> smoke their first cigarette within the first 30 minutes of waking up.</li> <li>use 4 mg first then switch to 2 mg if client is unable to tolerate.</li> </ul>	Recent CVA, immediate post MI, angina, life threatening arrhythmias.	Max 20 lozenges in 24hrs.
4 mg/q 1hr PRN	<ul style="list-style-type: none"> <li>Smokes first cigarette within 30 minutes of waking up.</li> </ul>		Max 5 lozenges in 6hrs

## Management of NRT side effects

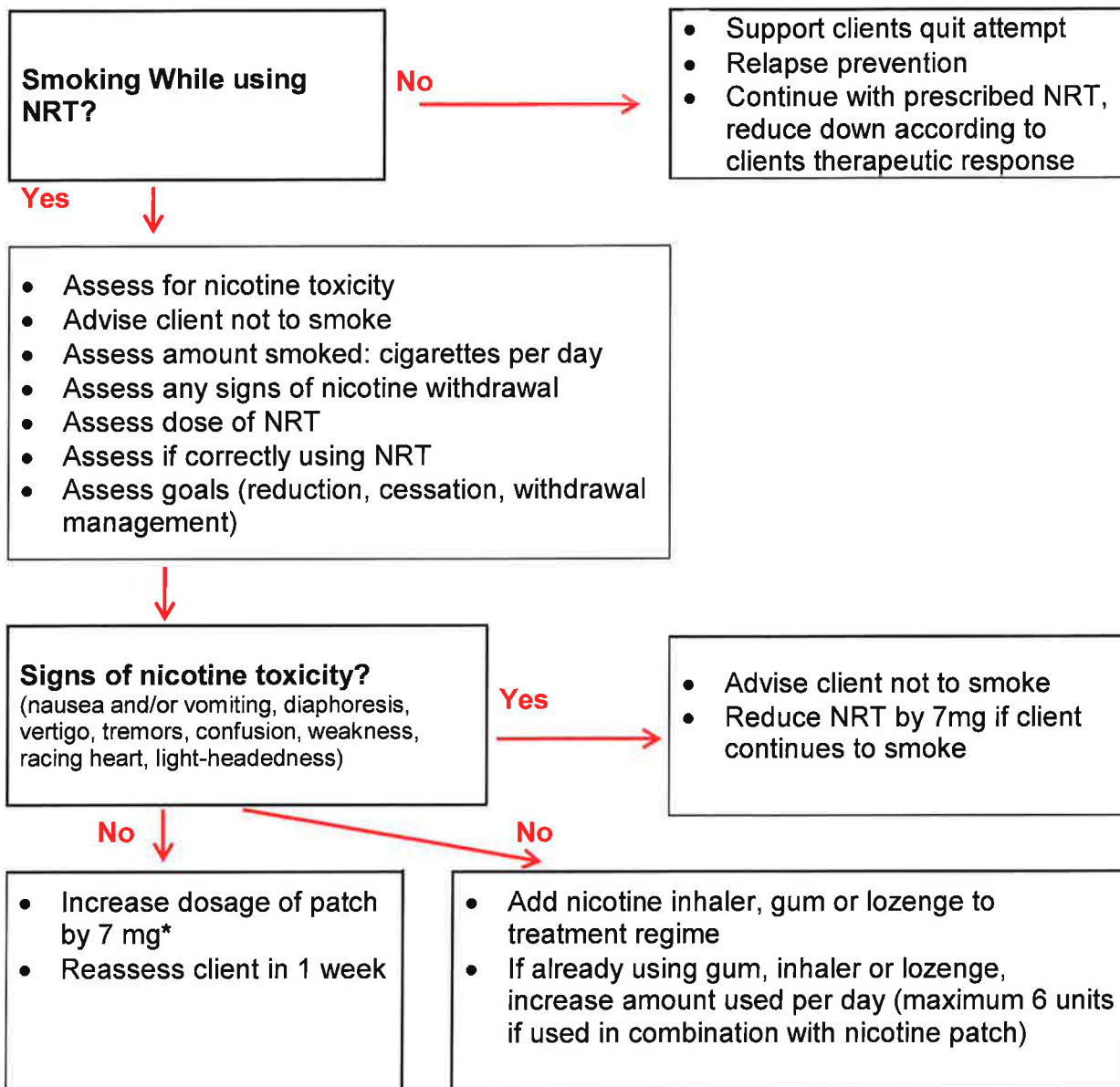
- If a client experiences symptoms of excess nicotine (nausea, vomiting, diaphoresis, tremors, light headedness, confusion, racing heart, weakness), then discontinue NRT and reassess dose. Advise client to seek medical attention.

- If withdrawal symptoms continue despite maximum doses of NRT (as prescribed in medical directive), request client's physician to reassess dose.
- If client complains of insomnia, remove nicotine patch at night.

## **Requirements for high-risk clients**

Adolescents (under the age of 18), pregnant/breastfeeding clients, or any client who recently (**in the last 2 weeks**) experienced a MI/CVA/cardiac arrhythmia must have a valid medical note/order from their respective treating physician/nurse practitioner. Medical notes/orders will be valid for a maximum period of 6 months. See Appendix C.

**APPENDIX B  
DECISION TREE TO ADDRESS NICOTINE WITHDRAWAL  
INCREASING PATCH DOSAGE BEYOND 21 MG<sup>6</sup>**



\*If client requires greater than 35 mg dosage (patch dose), refer client to see the doctor. The RN can then continue the client on dosages of 35 mg or higher. Any additional increases beyond 35 mg should be done by the client's treating health care practitioner.

<sup>6</sup> CAMH. Medical Directive – Administration of Nicotine Replacement Medications by Registered Nurses and Pharmacists in the Nicotine Dependence Clinic. Appendix B.



## **APPENDIX C MEDICAL NOTE**

Adolescents (under the age of 18), pregnant/breastfeeding clients, or any client who recently experienced a MI/CVA/cardiac arrhythmia must have a valid medical note/order from their respective treating physician/nurse practitioner. Medical notes/orders will be valid for a maximum period of 6 months.

Medical notes/orders must have the following information:

1. Client's full name
2. Physician/Nurse Practitioner name, address, telephone number
3. Physician/Nurse Practitioner NRT recommendation (i.e. I recommend that John Doe receive and use NRT).
4. Specify the dosage and route NRT should be given. (i.e. I advise Mr. John Doe to use up 21 mg of the nicotine patch daily).
5. The medical note/order must be signed and dated.