TOBACCO DEPENDENCE TREATMENT
FREQUENTLY ASKED QUESTIONS (FAQ)

Prepared by: The Nicotine Dependence Service (NDS) at the Centre for Addiction and Mental Health (CAMH)
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INTRODUCTION

The TEACH (Training Enhancement in Applied Cessation Counselling and Health) Project is a Knowledge Translation initiative designed to build interprofessional capacity in evidence-based tobacco dependence treatment among Ontario healthcare practitioners. Since the beginning of the project in 2006, TEACH has trained over 4000 participants from over 17 diverse disciplines, from more than 600 organizations and service settings.

The following document is a compendium of the most frequently asked questions from TEACH participants since 2006. These questions have emerged from in-class trainings, webinars as well our thriving Community of Practice of TEACH-trained healthcare practitioners. Although we respond to each question as we are asked, we have identified a need to provide further information and evidence-based research around these inquiries. This document containing the most frequently asked questions was created to bridge the gap between the responses we share with practitioners and the request to provide further information. We also wanted to provide a platform where we are able to direct similar inquiries towards a set of prepared responses to allow capacity for new questions to be addressed.

Each question asked in this document provides an evidence-based answer from subject matter experts combined with a comprehensive review of the literature. There are a total of 103 questions that are grouped into 16 content areas:

- Screening and Assessment
- Client Resources for Quitting Smoking
- Nicotine Replacement Therapy (NRT)
- Prescription Medications (Bupropion and Varenicline)
- Reduce-to-Quit
- Drug Interactions
- E-Cigarettes
- Smokeless Tobacco
- Contraband
- Specific Populations
- Clients with Complexity
- Smoke-Free Environments
- Tobacco Dependence Treatment for Staff
- The STOP Program
- Available Services & Supports
- Miscellaneous

This document also includes an appendices section where healthcare practitioners can find tools and articles to further enhance their knowledge in tobacco dependence treatment.

We encourage the dissemination of this document to anyone who may be interested in expanding their knowledge and skills regarding tobacco dependence treatment. Our aim is to provide healthcare practitioners with a resource that can be used to inform daily clinical practice and can be referred to as a reference tool. Also, we aim to expand the knowledge of practitioners beyond standard treatments and encourage exploration of alternative strategies that can enhance clinical practice.

If you have a question that is not listed here, please email teach@camh.ca with the subject line “New FAQ Question” and we will share your question with our faculty and include it in an updated version of this document.
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Please be advised that each subheading is hyperlinked within this document. Click on the desired subheading to locate your question of interest.

## SCREENING & ASSESSMENT

1. Is there a cessation documentation tool that uses a "check box" format for efficient recording?

2. Is there a standard assessment form or preferred way to phrase questions when assessing nicotine dependence? Also, are questions using a 5-point or 10-point scale recommended to avoid confusion?

3. I work at a public health unit and we would like to initiate financial means screening prior to distributing NRT so that we can give priority to those on social assistance or in financially compromised circumstances. Are there any procedures currently being used to do this? Is it recommended?

4. Are there any resources pertaining to integrating smoking cessation best practices within Flu Clinics?

5. What are the advantages and disadvantages of screening for tobacco use as part of the triage screening in your hospital emergency department? As well, are there challenges associated with implementing the 5 A’s minimal contact intervention for tobacco cessation in this setting for those who disclose tobacco use?

6. Can you tell me recommended timelines for following up with clients after initiating different smoking cessation treatments?

7. What withdrawal or mood monitoring scale/tool do you recommend using for smoking cessation?

## CLIENT RESOURCES FOR QUITTING SMOKING

8. Are there certificates available to reward clients who successfully quit using tobacco?

9. Are there any resources to motivate clients who have pets to quit smoking?

10. Where can I find smoking cessation CDs or DVDs that clients can listen to or watch in the comfort of their own home?

11. How can we help our clients learn to tolerate distress when quitting and, for those who smoke to suppress anger or other negative emotions, to learn to function and manage their emotions in a cost-effective way?

## NICOTINE REPLACEMENT THERAPY (NRT)

12. Can the nicotine the nicotine mouth spray trigger a positive breathalyzer test?
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>Why have you not included the nicotine mouth spray in your table comparing the different kinds of NRT available in the slides?</td>
</tr>
<tr>
<td>14.</td>
<td>Are there any empirical studies that support the manufacturer’s claim that the nicotine mouth spray works within 60-90 seconds, as described on the package leaflet?</td>
</tr>
<tr>
<td>15.</td>
<td>Is it a problem for patients to use the mouth spray in combination with the patch or gum?</td>
</tr>
<tr>
<td>16.</td>
<td>I have seen several people who have been using high dose NRT products for years – I have safety concerns, should I be attempting to intervene?</td>
</tr>
<tr>
<td>17.</td>
<td>Why does one need to remove the patch before working out?</td>
</tr>
<tr>
<td>18.</td>
<td>Although the NicoDerm and Life Brand nicotine patches are both designed to deliver 21mg over a 24 hour period, the NicoDerm patch labeling claims the patch contains 114 mg of nicotine while the Life Brand contains 52.5mg of nicotine. My client has expressed preference for the NicoDerm patch, claiming it is stronger and faster-acting. Is there evidence to support this?</td>
</tr>
<tr>
<td>19.</td>
<td>Would you be willing to comment on the “self-medication hypothesis”? For example how this relates to those with severe mental illness and NRT. Also, should we be cautious about this language?</td>
</tr>
<tr>
<td>20.</td>
<td>You mentioned a 16 hour patch (5, 10 and 15mg) at the previous webinar. Are you using the 16 hour patch at the Nicotine Dependence Clinic and what is the product name; cost difference etc.?</td>
</tr>
<tr>
<td>21.</td>
<td>Must the nicotine patch be placed on the upper body or can it be placed anywhere?</td>
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<tr>
<td>22.</td>
<td>Given that the NRT mouth spray contains a small level of alcohol, is it safe to prescribe to patients recovering from an alcohol addiction?</td>
</tr>
<tr>
<td>23.</td>
<td>How can I improve the adhesiveness of the NRT patch in clients suffering from hyperhidrosis (excessive sweating)?</td>
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<tr>
<td>24.</td>
<td>As a facility attempting to initiate a medical directive for NRT, are there any medical directives already in place at another institute that could be used as a reference?</td>
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<tr>
<td>25.</td>
<td>Can NRT be sold outside of a pharmacy setting (for example, in hospital retail outlets such as a gift shop)?</td>
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<tr>
<td>26.</td>
<td>Directions on the NRT package recommend the client speak with their doctor before initiating NRT about the possible side effects and risk factors that may result from using NRT. Should professionals dispensing NRT ask clients to speak with their doctor or request a doctor’s letter covering all of these listed risks?</td>
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<tr>
<td>27.</td>
<td>Where can I find empirical support for the addition of the NRT inhaler to our hospital formulary considering we currently offer the NRT patch and gum?</td>
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<tr>
<td>28.</td>
<td>Is it safe to prescribe NRT to clients who have experienced a recent cardiac event?</td>
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<tr>
<td>29.</td>
<td>Is it safe to use the ‘rule of thumb’: ~1mg NRT for each cigarette/day smoked?</td>
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<tr>
<td>30.</td>
<td>Where can I find information regarding or samples of an organization’s algorithm for dispensing NRT?</td>
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</tbody>
</table>
and the accompanying policy, including the process for off-label administration of NRT?

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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</thead>
<tbody>
<tr>
<td>31. Is there a 4mg mouth spray or is it only available in the 1mg dosage?</td>
<td></td>
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<tr>
<td>32. If a smoker has been using NRT for 12-16 weeks and has cut down to 7mg, can they continue using NRT or should they change to another pharmacotherapy?</td>
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<tr>
<td>33. If the spray is absorbed so quickly, is there a greater risk of dependence when compared to other NRT products?</td>
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<tr>
<td>34. Is it dangerous for clients to continue using the NRT gum for years?</td>
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<tr>
<td>35. Must the NRT patch be placed on the upper body or can they be placed on the legs/lower body?</td>
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**PRESCRIPTION MEDICATIONS (BUPROPION & VARENICLINE)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>36. For prescribing bupropion, do we use the sustained release (SR) or the immediate release (IR) version?</td>
<td></td>
</tr>
<tr>
<td>37. Our psychiatrists are fearful of prescribing varenicline to their patients (even those who are in a stable psychiatric status). If accompanied with counselling, is varenicline a safe medication to use in patients with stable psychiatric status? Are there any studies that I can refer to support this?</td>
<td></td>
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<tr>
<td>38. How does a client know when they can think about stopping bupropion or varenicline? If they remain quit at 3 months, how do they know if it would be helpful to continue? Do you recommend a trial of discontinuing the medication or dose reduction?</td>
<td></td>
</tr>
<tr>
<td>39. When bupropion for smoking cessation is not covered through a client's private insurance, is it appropriate to order bupropion for depression (not sure if that would be covered either)?</td>
<td></td>
</tr>
<tr>
<td>40. Some of my clients have been instructed by their pharmacist to avoid altering (reducing) their smoking pattern when starting varenicline prior to their quit date. Are these instructions correct?</td>
<td></td>
</tr>
<tr>
<td>41. Does varenicline or bupropion have a better a success rate?</td>
<td></td>
</tr>
<tr>
<td>42. If a client is admitted to the hospital and is already on an antidepressant other than Bupropion, are physician's advised to switch their prescription to Bupropion if the current antidepressant has been effective?</td>
<td></td>
</tr>
<tr>
<td>43. What is the success rate of using 0.5mg BID of varenicline vs. 1mg BID?</td>
<td></td>
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<tr>
<td>44. Could you find the number needed to treat (NNT) data for varenicline and bupropion to show its efficacy in cessation?</td>
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**REDUCE-TO-QUIT**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>45. Would you advise the use of the NRT patch even with a client who continues to smoke, as part of a reduce-to-quit strategy?</td>
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<tr>
<td>46. Can we use bupropoin and varenicline with the reduce-to-quit model or must these medications be</td>
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<tr>
<td>Question</td>
<td></td>
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<td>---------------------------------------------------------------------------------------------</td>
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<tr>
<td>47. Should smokers who are using gum as a means of reducing to quit be using 2mg or 4mg gum?</td>
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<tr>
<td>DRUG INTERACTIONS</td>
<td></td>
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<tr>
<td>48. If you offer NRT to clients who are taking Zyban, do you monitor blood pressure? Does hypertension risk increase if the client is on Wellbutrin and receiving NRT?</td>
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<tr>
<td>49. What considerations should be made when considering the combined use of multiple smoking cessation medications?</td>
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<tr>
<td>50. If smoking is permitted until day 12 while taking varenicline, would it also be safe then to recommend taking NRT oral products (2mg or 4mg) during this time?</td>
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<tr>
<td>51. Where can I find an up-to-date list of medications that interact with varenicline?</td>
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<tr>
<td>52. Where can I find an up-to-date list of medications that interact with smoking?</td>
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<tr>
<td>53. Have any studies tested NRT use in combination with CHAMPIX or Zyban?</td>
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<tr>
<td>54. Is varenicline dangerous for patients who are already on several different medications (7-10 on average) and can it act to destabilize these patients?</td>
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<tr>
<td>55. In patients who are depressed and already on a SSRI, is bupropion 150 mg daily the maximum amount that should be used in combination with the SSRI or is 150 mg BID also appropriate?</td>
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<tr>
<td>E-CIGARETTES</td>
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<td>56. Is Ciganot safe and can it be recommended to clients who are seeking hand-to-mouth stimulation but do not wish to use the NRT inhaler?</td>
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<tr>
<td>57. Are there any smoke-free inpatient facilities that include E-cigarettes as part of their NRT treatment or must they be returned with the family upon admission?</td>
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<tr>
<td>58. If e-cigarettes were regulated, could they potentially be used as another form of NRT?</td>
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<tr>
<td>59. Do e-cigarettes contain alcohol?</td>
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<tr>
<td>SMOKELESS TOBACCO</td>
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<tr>
<td>60. Is it appropriate to apply our knowledge about addiction, withdrawal and cessation interventions involving cigarettes to clients who are addicted to smokeless tobacco products?</td>
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<tr>
<td>61. Can I use NRT for patients using smokeless/chew tobacco? If so, where can I find information on dosing?</td>
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<tr>
<td>62. Are there any resources available online to help clients quit chewing tobacco?</td>
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<td>Question</td>
<td>Answer</td>
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<tr>
<td><strong>63. Does chew tobacco improve athletic performance?</strong></td>
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<tr>
<td><strong>CONTRABAND</strong></td>
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<tr>
<td><strong>64. Is it against the law for a hospital to be in possession of contraband cigarettes (handed in by clients upon admission) and for hospital staff to dispense these cigarettes back to the client for their smoke break?</strong></td>
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<tr>
<td><strong>65. What are some strategies hospitals can implement in order to prevent nurses from having to hold and dispense contraband cigarettes belonging to patients?</strong></td>
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<tr>
<td><strong>SPECIFIC POPULATIONS</strong></td>
<td></td>
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<tr>
<td><strong>66. What percentage of smokers do you think are also suffering from ADHD and/or smoke as a means to self-medicate and manage their ADHD?</strong></td>
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<tr>
<td><strong>67. Is the reduce-to-quit strategy recommended for pregnant women or persons with mental health issues who are ready to use NRT?</strong></td>
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<tr>
<td><strong>68. Can I offer NRT to pregnant women and adolescents? If so, what resources can I refer to for further information (i.e. dosing)?</strong></td>
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<tr>
<td><strong>69. Are there resources available for helping people who are transgendered with quitting smoking?</strong></td>
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<td><strong>70. Where can I find smoking cessation/prevention resources specifically for the Indigenous community?</strong></td>
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<td><strong>71. Is there a specific dosing protocol of smoking cessation medications for clients considered to be morbidly obese?</strong></td>
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<tr>
<td><strong>72. My client is a long-haul truck driver who smokes to avoid weight gain. How can I help him find alternatives and quit smoking?</strong></td>
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<tr>
<td><strong>73. Are there any studies that compare abrupt versus gradual tobacco cessation in individuals with schizophrenia?</strong></td>
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<tr>
<td><strong>74. Does nicotine from NRT get passed through breast milk?</strong></td>
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<tr>
<td><strong>75. Are the nicotine spray and gum advisable for teens who are trying to quit smoking, even if they are pregnant?</strong></td>
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<tr>
<td><strong>76. Is bupropion contraindicated in adolescents who wish to stop using tobacco?</strong></td>
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</tr>
<tr>
<td><strong>77. Is varenicline recommended for use in teens who wish to quit smoking?</strong></td>
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<tr>
<td><strong>78. Have psychiatric populations been included in varenicline studies/trials of just “regular” populations?</strong></td>
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<tr>
<td><strong>79. Is there any Canadian evidence supporting the fact that usage of NRT in psychiatric populations should not differ from how it is used in “regular” populations?</strong></td>
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<tr>
<td>Question</td>
<td>Answer</td>
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<td>-------------------------------------------------------------------------</td>
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<tr>
<td>80. Does smoking exacerbate Crohn’s Disease?</td>
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<tr>
<td>81. Have there been any updates from Heath Canada re: Numerous CHAMPIX starts and increased risk of a Myocardial Infarction (MI)?</td>
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<tr>
<td>82. My client is a post-menopausal female with chronic insomnia (potentially exacerbated by nicotine withdrawal symptoms) who chain smokes 4 cigarettes in the early morning for “something to do.” While this treats her nicotine withdrawal, the stimulant effect prevents her from returning to sleep. How can I help her break the cycle?</td>
<td></td>
</tr>
<tr>
<td>83. My client was smoke-free for 80+ days while using Champix but recently relapsed and is now smoking 6-8 cigarettes a day. She has one box of NRT patches left and cannot afford to purchase additional patches but qualifies for free Champix by her Ontario Drug Plan. She has an upcoming dental surgery to remove her remaining teeth. Should I advise her to 1) start Champix immediately in hopes she will have stopped smoking before her dental surgery or 2) time the start of her prescription so that she is still taking Champix during her recovery from her procedure or 3) suggest an alternative smoking cessation technique?</td>
<td></td>
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<tr>
<td>84. If my client experiences a lot of coughing when quitting smoking, at what point should I refer them to a physician?</td>
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<tr>
<td>85. My patient has tried Zyban, CHAMPIX, and the patch with no success. She has a history of mental illness as well as angina and underwent an angioplasty in 2010. She has smoked 25 cigarettes per day for the past 40 years. She is now hoping to try the patch in combination with the inhaler. Given her cardiovascular disease, what would be the best treatment option for her?</td>
<td></td>
</tr>
<tr>
<td>86. Should smoke-free hospitals require patients to sign a waiver to leave the property to smoke? If so, does it refer to the legal and medical implications of doing so and/or the prohibition of taking hospital property (i.e. medical equipment) with them?</td>
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<tr>
<td>87. What approaches are available to promote tobacco-free living at workplaces? What types of incentives or supports might be offered as part of this promotion?</td>
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</tr>
<tr>
<td>88. What precautions might a smoke-free facility put in place to prevent third-hand smoke (smell of smoke the smoker brings into the building on their body) where smoking and non-smoking employees must share a workspace that is respectful to both parties?</td>
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</tr>
<tr>
<td>89. What are the costs and benefits associated with designating a multi-unit apartment building smoke-free?</td>
<td></td>
</tr>
<tr>
<td>90. I want to initiate smoking cessation programming in my workplace for employees. How should I go</td>
<td></td>
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</tbody>
</table>
What are some key considerations I should take into account?

91. Should my organization cover the cost of smoking cessation aids for staff? What procedure must be put in place?

**THE STOP PROGRAM**

92. Will STOP be doing a gradual-to-quit study?

93. If the research suggests that at least 8 weeks of NRT treatment is optimal, why does STOP on the road only offer 5 weeks of NRT?

94. Will STOP cover the use of gum in combination with the patch?

95. Nunavut is struggling with access to NRT in our isolated communities where there are no pharmacies and most people require NIHB coverage, which requires a prescription. How can we make NRT more accessible in these communities?

96. Are there any new initiatives to receive cessation meds through STOP Study (i.e. pharmacy, Public Health etc.)?

**AVAILABLE SERVICES & SUPPORTS**

97. Where can I find a listing of active tobacco cessation service providers in my area?

98. Are there any inpatient tobacco cessation treatment programs in Ontario?

99. Is there funding available for tobacco cessation medication?

100. Is there funding available for agencies or organizations (for example, a residential treatment facility) to provide tobacco cessation medications for clients without a doctor on staff?

**MISCELLANEOUS**

101. Is nicotine a “gateway drug”?

102. When is World No Tobacco Day?

103. How can I motivate my clients to quit “the last few” cigarettes (3-4) from their daily intake?
1. Is there a cessation documentation tool that uses a "check box" format for efficient recording?

Given that documentation is increasingly completed electronically, the Nicotine Dependence Clinic recommends that healthcare practitioners amend their existing electronic monitoring records to include questions which screen for tobacco use. Many of these questions may be translated into a check-box format if this is the preferred method of recording at your workplace. However, it is important for healthcare practitioners to ensure that available responses are as inclusive as possible. Allowing for diversity in client goals and subjective experiences allows the practitioner to gather thorough information and develop an appropriate and individualized intervention. Consider including an “other” option in which clients can provide a response that may be unavailable in the documentation form. The following are documentation guidelines for assessing patients’ tobacco use status:

Documentation Guidelines: Assessment of Smoking Status

On admission or first contact with the client, determine:

1. Allergies: contact sensitivity to patch? allergy to bupropion or varenicline?
2. Pattern of smoking: daily/nondaily/ex-smoker/never smoker
3. Amount smoked: cigarettes smoked per day
4. Withdrawal when stopping and how soon after stopping
5. Any Signs/symptoms of nicotine withdrawal at this time?
6. Readiness to change
7. Clients’ goals (reduction, cessation, withdrawal management)
8. Inpatient status: voluntary or involuntary?
9. Medical History: recent or previous Myocardial Infarction (MI), unstable angina, arrhythmia, Temporomandibular Joint Disorder (TMJ), dentures
10. Previous experience with cessation medication and past quit attempts, cessation/reduction, including duration of cessation periods and reasons for relapse.
11. Psychological symptoms, such as depression, anxiety or suicidality, in the last 30 days, during lifetime.

Documentation Headings

*Physician or Nursing Note: re: Nicotine Clinic Outpatient*

<table>
<thead>
<tr>
<th>Medical Hx</th>
<th>Pack History</th>
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<tbody>
<tr>
<td>Psychiatric Hx</td>
<td>Importance</td>
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<tr>
<td>Medication</td>
<td>Readiness</td>
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</tr>
<tr>
<td>Substance Use</td>
<td>Confidence</td>
</tr>
<tr>
<td>Allergies</td>
<td>Quit Date</td>
</tr>
<tr>
<td>Onset of Smoking</td>
<td>Previous Attempts</td>
</tr>
<tr>
<td>Pattern</td>
<td>Reasons to Quit</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>CO (carbon monoxide)</td>
</tr>
<tr>
<td>Triggers</td>
<td>BP (Blood Pressure)</td>
</tr>
<tr>
<td>Mood</td>
<td>Height</td>
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<tr>
<td>Mental Status Exam</td>
<td>Weight</td>
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<tr>
<td>Patient Health Questionnaire – reassessed monthly if prescribed bupropion and/or varenicline and/or client has history of depression and/or anxiety)</td>
<td>Goal</td>
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**Sample Documentation**

*Nursing note: re: CAMH Inpatient*

31/05/2005 @ 1105h. Ct reported smoking 20 cigarettes per day (CPD) over past 17 yrs. Interested in reducing cigarette intake. Denies any allergies to nicotine patch, bupropion or varenicline. Denies any cardiac history, no recent M.I., no unstable angina, no arrhythmias reported. Denies wearing dentures but reports history of TMJ dysfunction.

Last cigarette 2h ago, reports cravings, denies any other s/s of withdrawal, none observed. Voluntary admission. Discussed starting on 21mg nicotine patch and 10mg nicotine inhaler as gum not suitable due to TMJ history. Reviewed directions for using both patch and inhaler, discussed s/s of nicotine overdose and instructed to report to RN should he experience any symptoms. Ct feels he could realistically reduce to 10-15 CPD.

Plan – 21mg nicotine patch OD and nicotine inhaler prn, max 6/d as per medical directive.

Will review with MD. ______________________Nursename, RN.

1315h. Ct tolerating nicotine patch and inhaler well, denies any s/s of nicotine o/d or withdrawal, none observed. No other complaints. ______________________Nursename, RN.

**Sample Progress Note**

*Group Visit*

**Group Name:** Coping Skills, Session 2

**Service Type:** Addiction

**Attendance:** Attended

**Group themes:** Identifying Triggers/ coping strategies
Level of participation/ group interaction: moderate
Comments: Client reported being triggered at work due to “smoke breaks and smoking buddies”, coffee was another trigger, client plans to try drinking herbal tea instead of coffee, has doctor apt on ___ to discuss med options
Addiction Tx goal: reduce to quit
Mental Health Tx Goals: client identified none, reports no stressors, views past diagnosis of depression as situational
Goal Status: In progress
Homework given: Tracking sheets, Coping with Cravings worksheet
Next Session: ________

Documenting Cessation Interventions

Centre for Disease Control (CDC) guidelines recommend:

- Expanding the vital signs to include tobacco use
- Using tobacco stickers on all patient charts, or
- Indicating tobacco use status either through the physician’s electronic medical record or any other form of computerized reminder system

2. **Is there a standard assessment form or preferred way to phrase questions when assessing nicotine dependence? Also, are questions using a 5-point or 10-point scale recommended to avoid confusion?**

There are several tools available to assess for nicotine dependence and tobacco use. At CAMH, healthcare practitioners administer two assessment forms to clients upon admission to the tobacco cessation program.

One assessment form, the “Addiction Severity Index,” is distributed to all clients entering any addiction program at CAMH. This assessment includes seven potential problem areas: Medical, Employment/Support Status, Alcohol, Drug, Legal, Family/Social, and Psychological. Each section is concluded with scaling questions, which ask the client to rate on a 5-point scale how bothered they have been by any of the problems in that section and how important treatment is for that area. The scale is: 0 = not at all, 1 = slightly, 2 = moderately, 3 = considerably, and 4 = extremely. Scaling questions can be useful to capture the degree of a patient’s subjective experience. Whether a 5-point or 10-point scale is more appropriate will often depend on the nature of the question. For example, the next assessment uses both 5- and 10-point scaling questions. Questions pertaining to how strongly a client has been feeling a particular emotion use 5-point scales while 10-point scales are often used when evaluating client readiness or the importance of quitting to the client. Patients are warned that unanswered questions are preferred over inaccurate answers. The assessment form instructs the interviewer to make plenty of comments so that another person reading the assessment will be given a complete picture of the client’s perceptions of his/her problems.

The other assessment form, the “Self-Assessment: Nicotine Dependence Clinic,” is used exclusively with clients of the Nicotine Dependence Clinic. This assessment uses check-boxes,
fill-in-the-blank, and scaling questions (both 5- and 10-point scales are used within the
assessment form). This assessment form covers the following areas of interest: Tobacco use
(type and amount of tobacco); Smoking Cessation History ( quitting attempts, experience and
length of quit attempt, method used, reasons for relapse, goals for tobacco use, and stage of
change); Readiness (importance of quitting, confidence to change, readiness to change, life
stressors, supports, triggers, psychiatric history, substance use, caffeine use, and medical
history). The assessment also includes the Fagerstrom Test for Nicotine Dependence and the
Minnesota Withdrawal Score.

To access the Fagerstrom Test for Nicotine Dependence, the Minnesota Withdrawal Score, and
many other tobacco cessation assessment tools, please download a copy of the “Counsellor’s
Guide to Cessation Treatment” from the Nicotine Dependence Clinic website:

https://www.nicotinedependenceclinic.com/.../Counsellors%20Guide%20to%20Cessation%20Treatment.doc

3. I work at a public health unit and we would like to initiate financial means screening
prior to distributing NRT so that we can give priority to those on social assistance or
in financially compromised circumstances. Are there any procedures currently being
used to do this? Is it recommended?

We do not enforce financial means screening for clients entering the tobacco cessation program
at the Nicotine Dependence Clinic. It is our belief that financial incentives encourage tobacco
users to quit regardless of their financial capacity. Similarly, the cost of smoking cessation aids
can serve as a barrier to quitting even for individuals who have the means to purchase these
products. Thus, exclusion from available financial incentives based on financial means may
discourage promising candidates from quitting tobacco who otherwise may have enjoyed great
success in becoming smoke-free.

While healthcare practitioners at the Nicotine Dependence Clinic do not screen for financial
means, they are required to ask clients some finance-related questions. However, these
questions are intended to identify financial factors in the client’s life that may influence
treatment, not to screen clients for their eligibility to receive financial assistance. For example,
new clients are asked for their employment status, but are not asked to provide proof or to
disclose occupation. We understand that the income a client generates is not necessarily an
accurate reflection of the client’s disposable income, as factors such as debt and other
addictions (such as gambling) are not represented by this figure. Another income related
question healthcare practitioners ask new clients is whether or not they are on financial
assistance, as this may qualify clients to receive free varenicline or bupropion based on the
coverage provide by the Ontario Disability Support Program (ODSP). Healthcare practitioners
should also be curious about where clients purchase their cigarettes (i.e. are they contraband or
brand-name cigarettes?). This question is intended to indicate, to some degree, the disposable
income of the client and whether financial restraints are likely to present a barrier during
treatment. For example, a client who can afford to buy name-brand cigarettes from a retail outlet
is more likely to be able to afford NRT than someone who is purchasing a “baggy” of 200
cigarettes at a time. Finally, clients are asked in broad terms to identify any current stressors they may be experiencing in their life, including financial problems, so that the clinician can better understand the client’s present situation.

Moreover, questions are aimed to identify factors in the client’s life that may affect the treatment in order to inform the clinician’s intervention strategy and foster client success.

4. **Are there any resources pertaining to integrating smoking cessation best practices within Flu Clinics?**

A recent study conducted by Aveyard and colleagues (2011) offered strong support for the integration of brief, opportunistic smoking cessation intervention in diverse general practice settings. Findings suggest that both advice to stop smoking and assistance with smoking cessation increased the likelihood that patients would attempt to quit smoking. Results indicated, as well, that offering support for smoking cessation (such as medications or counseling) motivated significantly more people (an additional 40-60% of people) to attempt to quit smoking, as compared to simply being advised to quit without additional supports. The only intervention that seemed to significantly impact long-term abstinence rates was the provision of NRT. However, it has been well-documented within the literature that even unsuccessful quit attempts are clinically important because they are positively associated with eventual cessation success.

Richard San Cartier, a Primary Care Nurse Practitioner for the North Shore Tribal Council and TEACH faculty member, encourages healthcare practitioners to maximize interactions with clients in flu clinics and discuss tobacco use. In his article, “Have you thought about the flu shot as an opportunity to talk about tobacco use?” Richard San Cartier discusses his approach and provides a helpful illustration of how a health practitioner might implement smoking cessation practice in the context of a flu clinic.


5. **What are the advantages and disadvantages of screening for tobacco use as part of the triage screening in your hospital emergency department? As well, are there challenges associated with implementing the 5 A’s minimal contact intervention for tobacco cessation in this setting for those who disclose tobacco use?**

At CAMH, we encourage all healthcare practitioners to screen for tobacco use as part of their existing intake process. The working environment of an emergency department presents unique challenges for healthcare providers and requires a distinct set of considerations when implementing smoking cessation interventions that are both effective and appropriate in this setting.

Choo and colleagues (2012) conducted a multi-center, cross-sectional study to evaluate patient preferences for various tobacco interventions in the context of the emergency department. Findings indicated that there was a tendency among physicians to collect information pertaining
to patients’ smoking habits but a wide-spread failure to counsel, refer, and/or prescribe smoking cessation medications to these patients. Certainly, the emergency department presents some inherent challenges to the initiation of smoking cessation intervention, such as time constraints and attitudes about the appropriate context for preventative health practices. However, a promising finding was that 75% of patients indicated that they would be interested in some kind of smoking cessation intervention if it was offered. Overall, patients tended to prefer interventions that required less time investment on behalf of both the patient and the physician, such as informative brochures or quit-line referrals, as opposed to interventions requiring a greater time investment, such as immediate bedside counseling. As well, patients expressed preference for certain counseling styles over others. For example, while shaming tactics were unpopular with most patients, many patients expressed surprising positivity for highly directive counseling (i.e. you should quit smoking) and scare tactics (i.e. images of smoking damage on the body). In general, motivational counseling proved most popular among patients, which is consistent with the training on smoking cessation counselling provided by TEACH. To learn more about motivational interviewing, please refer to the appendix for a list of Motivational Interviewing resources and publications.


6. Can you tell me recommended timelines for following up with clients after initiating different smoking cessation treatments?

According to Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, there are no evidence-based follow-up guidelines other than the following:

The evidence demonstrates that smokers are most likely to relapse within the first week, regardless of the smoking cessation method adopted (Garvey et al., 1992; Law and Tang, 1995; Rose, 1996). Therefore, while there are no firm guidelines on how often clinicians should follow-up with their clients during the smoking cessation process, it is important to ensure a discussion occurs in this pivotal first week. Using a nonjudgmental approach, the clinician should attempt to determine how the client is tolerating the medication, whether the client is using the medication properly, if an adequate dose of the medication has been prescribed, as well as any struggles the client may be experiencing in attempting to quit (i.e. unhelpful attitudes, environment, relationships).

Depending on available resources and the feasibility of in-person contact, a phone call may be a more practical option to ensure this critical one-week follow-up takes place. Clinicians should inform clients about the risks of relapse and ask that they consider a follow-up in that first week following cessation. Clients are also advised to call the clinician immediately if any unbearable side effects occur. Otherwise, clinicians should engage clients in a discussion to help them gauge what frequency of visits would be both feasible and appropriate. According to Dr. Peter Selby, clients generally opt to come in for a follow-up every 2-4 weeks, which is acceptable provided when the client leaves the office they are equipped with proper instructions for what to do and how to manage between visits.
As smoking cessation practice is evolving, there are increasing options for how often a client can be seen and by whom. For example, there are currently counselling codes that are available for pharmacists which dictate that if someone is receiving varenicline or bupropion through the Ontario Drug Benefit (ODB), they can enroll with a pharmacist for ongoing counselling.


7. **What withdrawal or mood monitoring scale/tool do you recommend using for smoking cessation?**

The most appropriate assessment tool will often depend on the setting in which the smoking cessation services are being delivered (P. Selby, personal communication, August 8, 2012). The Nicotine Dependence Clinic at CAMH recommends the Minnesota Withdrawal Scale, which assesses smoking urges in addition to withdrawal symptomology. The Beck Depression Inventory (BDI) is also a useful mood monitoring tool. It should be noted that the BDI must be purchased and thus may not be a feasible option for all health care settings. Finally, the PHQ-9, -7, and -2 are recommended to screen for anxiety and mood. As mentioned, health care settings will use different assessment tools based on the nature of services provided. For example, a fast-paced primary care setting will likely employ shorter assessment tools than a more specialized setting requiring more detailed information from patients. Healthcare practitioners should be aware that a clinician conversation is often crucial to rate the severity of withdrawal and mood symptoms, and that overreliance on assessment tools should be avoided. An important consideration when choosing an assessment tool is the capacity to use the tool to measure changes in mood and symptomology (i.e. a repeat measure), in order to monitor whether symptoms become significant and require clinical intervention.

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**CLIENT RESOURCES FOR QUTTING SMOKING**

8. **Are there certificates available to reward clients who successfully quit using tobacco?**

It is important to celebrate achievements throughout the quit process, resources permitting. Many organizations offer some form of reward to recognize clients’ progress at varying intervals of remaining smoke-free. However, many of these organizations differ in the reward offered as well as the markers they use to denote milestones in the quitting process. For example, while some organizations offer certificates every three months, others may choose to offer clients T-shirts after one year of remaining smoke-free. Regardless of the organization where you
practice, verbal reinforcement can go a long way to prevent clients from becoming discouraged and losing confidence in their ability to achieve their cessation goals.

9. **Are there any resources to motivate clients who have pets to quit smoking?**

Many resources have been developed to inform the public of the dangers associated with second hand smoke to pets. These resources may be useful to offer clients who have pets as an additional incentive to quit smoking or make changes to decrease their pet’s exposure to second hand smoke.

*FluffyQuits.com* is a helpful resource to offer clients who have pets. The site provides information about the damaging effects of smoke on pets and tips to reduce harm to your pet.

*Paw Print Post*, as part of USA Today, contains articles that offer information pertaining to the toxic effects of smoking on pets that may be informative and motivational to clients who have pets. Click the following link to read one such article, entitled “Another reason to stop smoking: Your pets’ health”:


10. **Where can I find smoking cessation CDs or DVDs that clients can listen to or watch in the comfort of their own home?**

There are several audio CDs available to help clients quit smoking from home. Each of the following CDs* can be ordered online and some may even be found in your neighborhood bookstore.

*Meditainment: Quit Smoking* by Richard Latham

*6 Days to Quit Smoking* by Gwen Randall-Young

*Dr. Larry’s Quit Smoking* by Larry Deutsch

*Quit Smoking Auto-Matically* by Bob Griswold and Deirdre Griswold

*Quit Smoking: 20 Minute Meditation Music to Stop Smoking* by Vic Meditation Music

Studio Sorisio

*The Easy Way to Stop Smoking* by Allen Carr and Simon Prebble

*Stop Smoking Forever* by Glenn Harrold

*Quit Smoking Now* by Patrick Marsolek

*Stop Smoking in One Hour: Play the CD... Just Once... and Never Smoke Again!* by Susan Hepburn [CD included with purchase of paperback]
11. How can we help our clients learn to tolerate distress when quitting and, for those who smoke to suppress anger or other negative emotions, to learn to function and manage their emotions in a cost-effective way?

In order to help a client tolerate and manage distress, Dr. Peter Selby (Head of the Nicotine Dependence Clinic at CAMH), suggests it is important for the clinician to understand these negative emotions and the cognitions that drive them. Dr. Selby provides two useful questions that may help clinicians open up dialogue about these emotions:

1) What generally happens to you when you quit smoking?
2) What is your greatest fear about quitting smoking?

Some clients may fear they will lose control and they will not be able to handle the distress associated with quitting smoking. This is an excellent opportunity to brainstorm collaboratively, the various actions the client could reasonably take in these feared situations in order to secure a few moments without smoking.

It is important to acknowledge both the negative emotions the client may have towards the quitting process (such as anger or grief) as well as those caused by nicotine withdrawal itself (such as irritability). Bupropion may be an attractive pharmacological aid for some clients because it tends to attenuate the negative emotions associated with quitting (Singh & Kumar, 2010), which Dr. Selby suggests may explain some of its success at preventing relapse (personal communication, August 8, 2012). A helpful therapeutic strategy may be to frame the quitting process in terms of a “break-up” (which builds upon the understanding that clients have developed a powerful relationship with cigarettes). When using this technique, it is important to emphasize the role of the cigarette as the client’s abusive ex-lover, instead of a healthy, fulfilling partnership which may fuel unhelpful cognitive distortions.


NICOTINE REPLACEMENT THERAPY (NRT)

12. Can the nicotine mouth spray trigger a positive breathalyzer test?

According to Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, we are still waiting for clarification as to the amount of alcohol in the breathalyzer (personal communication, August 8, 2012). He suggests that depending on the method chosen to calculate the volume of alcohol (for example, based on a weight for volume or volume for volume), the amount of
alcohol may appear infinitesimal or substantial. Further clarification is needed given the product monograph is currently unclear.

It has been found that liquor chocolates can trigger a positive breathalyzer test; however, a repeat measure within two minutes shows that the alcohol reading tends to drop dramatically within minutes of consuming the chocolate containing liquor. This observation has clinical relevance because it shows that while many substances may trigger a local positive breathalyzer test, a repeat measure 10-15 minutes later will likely result in a reading of zero (if, in fact, the alcohol concentration was local and not systemic). Therefore, using a repeat measure is an excellent way to test whether the alcohol concentration is local or systemic (i.e. when someone has been drinking alcohol); a systematic positive alcohol reading would not dissipate so dramatically. Moreover, although all of the products mentioned can produce a positive test in the short term, these results do not reflect a true positive test and a repeat measure 10-15 minutes later should clarify the true alcohol concentration present in the system.

13. Why have you not included the nicotine mouth spray in your table comparing the different kinds of NRT available in the slides?

We have just updated the table comparing the different kinds of NRT available to include the mouth spray.
14. Are there any empirical studies that support the manufacturer’s claim that the nicotine mouth spray works within 60-90 seconds, as described on the package leaflet?

It should be taken into consideration that craving relief studies are inherently very subjective. If nicotine is the source of the craving relief, the client should experience this relief for 60-90 minutes (Kraiczi et al., 2011; McRobbie et al., 2010).
15. Is it a problem for patients to use the mouth spray in combination with the patch or gum?

Combination NRT therapy has not been associated with any known risks therefore it should not be a problem for patients to use the mouth spray in combination with other forms of NRT (Ebbert, Hays, & Hurt, 2010). As a responsible clinician, however, it is important to establish a valid rationale which justifies the use of combination therapy over monotherapy. For example, some clients wish to use several NRT products because they assume “more is better.” In this case, the clinician may opt against prescribing combination nicotine replacement therapy and take the opportunity to educate clients that monotherapy is often sufficient enough to alleviate nicotine withdrawal and help the client to achieve abstinence.

The patch is often the first-line of defense in terms of NRT products because it is the least reinforcing and provides a constant level of nicotine to both the blood and the brain so that nicotinic and dopaminergic receptors are desensitized (Hajek, McRobbie, & Gillison, 2007; P. Selby, personal communication, August 8, 2012). This, in turn, reduces cravings and minimizes the degree to which reward pathways are activated in the event of a lapse. Fast-acting NRT products, also called breakthrough NRT (i.e. gum, spray), are reserved for high craving situations (Bader, McDonald, & Selby, 2009).

A reasonable rationale that would support the use of multiple forms of NRT would be a client who wants to tailor their treatment method according to the setting (for example, a client may prefer the discreteness of the gum while at work but prefer the inhaler in the privacy of the home). The primary guideline, according to Dr. Peter Selby (Head of the Nicotine Dependence Clinic at CAMH), is *titrate to effect* while monitoring for nicotine toxicity and the development of dependence or abuse. It is also important that clinicians engage clients in a discussion about the risks associated with each NRT product, such as the greater potential for dependence when using immediate release products, such as the mouth spray (Hajek, McRobbie, & Gillison, 2007).

**16. I have seen several people who have been using high dose NRT products for years – I have safety concerns, should I be attempting to intervene?**

Before intervening, it is important to understand the context of the client’s extended NRT use (P. Selby, personal communication, August 8, 2012). Although relatively safer than smoking, clients should be educated on the risks of consuming high doses of nicotine (Murray et al., 1996). Since the nicotine from NRT is delivered arterially (vs. intravenously) and at much lower levels compared to a cigarette, the client may be exhibiting compensatory behaviours to satisfy their nicotine addiction (Joseph & Fu, 2003). On the other hand, some smokers will require maintenance nicotine and may relapse if NRT use is discontinued (CAMH, 2009). It is integral that clients appreciate that while safer than tobacco use, there may be risks associated with long-term NRT use, such as diabetes, insulin resistance, potential cardiovascular risks, and other unknown risks (Balakumar & Kaur, 2009; Borowitz & Isom, 2008; de Oliveira et al., 2010; Eliasson, Taskinen, & Smith, 1996; Hecht, 2012; Inoue et al., 2011; Murray et al., 1996). Clients at the Nicotine Dependence Clinic at CAMH have been treated with varenicline in order to help them discontinue NRT when there is indication they may be addicted to NRT (P. Selby, personal communication, August 8, 2012).


**17. Why does one need to remove the patch before working out?**

The level of physical or strenuous activity reached during a workout increases the blood circulation to the skin and muscle of the area being targeted (P. Selby, personal communication, August 8, 2012). This increase of blood circulation causes greater absorption of nicotine into the body and cause the patch user to feel a nicotine boost. Physical exercise also reduces blood flow to the liver, which metabolizes nicotine. Moreover, there is the probability that the patch will not stick to the body again after being removed.
Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, addresses these concerns by suggesting two recommendations for clients:

1. Wait to put on the patch until after the client has exercised and showered, or
2. Time the workout so that it does not fall within the first few hours of wearing the patch (as this is when nicotine levels are rising in the body), and schedule the workout at the end of the dosing interval.

18. **Although the NicoDerm and Life Brand nicotine patches are both designed to deliver 21mg over a 24 hour period, the NicoDerm patch labeling claims the patch contains 114 mg of nicotine while the Life Brand contains 52.5mg of nicotine. My client has expressed preference for the NicoDerm patch, claiming it is stronger and faster-acting. Is there evidence to support this?**

Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, explains that the Life Brand patch, like all generic brands, is made by Habitrol and is a different product from the patch developed by NicoDerm (personal communication, August 8, 2012). While both the NicoDerm and Life Brand patch deliver the same amount of nicotine over a 24 hour period, they are distinct in how they are manufactured and the technology they use to deliver nicotine into the body.

The NicoDerm patch has an immediate onset of action and will, indeed, deliver nicotine into the body much faster than the Life Brand patch due to the way it is manufactured. In terms of the NicoDerm patch, the surface area of the patch directly reflects the dose of nicotine contained in the patch (i.e. patches containing higher doses of nicotine are physically and proportionally larger than those containing lower doses of nicotine). In addition, the nicotine contained in the NicoDerm patch is impregnated directly into the adhesive, allowing for more rapid absorption of nicotine into the body compared to the Life Brand. This difference in technology employed by the two brands also explains why these products require different concentrations of nicotine within the patch to deliver same 21mg dose of nicotine to the body. The NicoDerm patch uses gradient technology to deliver nicotine into the body. Therefore, using this technology, 114mg of nicotine is required to push 21mg of nicotine across the skin whereas the technology employed by the Life Brand only requires 52.5mg of nicotine to push 21mg of nicotine across the skin.

Dr. Selby emphasizes that preferences between the two products are subjective and that neither product is inherently better or worse than the other. They are simply different and will, therefore, satisfy different clients according to their needs. For example, the faster absorption of nicotine associated with the NicoDerm patch may be critical for clients who need immediate relief when they put on their patch in the morning after an entire night of without a cigarette. On the other hand, some clients prefer to put the Life Brand (or Habitrol) patch on at night so that it reaches its peak when they are first waking up, thus reducing cravings for that morning cigarette. As well, clients may find that the NicoDerm patch sticks to the skin better, while others complain of greater skin irritation, compared to the Life Brand. Although there are pros and cons associated with both products, the empirical research to date has found they are equally...
effective in helping clients quit smoking. Therefore, when choosing an appropriate patch, it is important to consider the needs of the individual client and to be prepared to adjust the treatment plan based on client feedback and/or adverse reactions to the product.

19. Would you be willing to comment on the "self-medication hypothesis"? For example how this relates to those with severe mental illness and NRT. Also, should we be cautious about this language?

Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, cites several problems with the self-medication hypothesis. First, if self-medication was effective, clients would self-medicate for a short period of time and be cured (or go into remission). However, this is not generally the case; clients who self-medicate tend to do so chronically in order to keep symptoms under control. Second, people who self-medicate often experience a significant non-response to that “medication” (i.e. will continue to experience adverse symptoms and require other and/or further medication). Third, even if smoking is functioning beneficially to reduce their problematic symptomology, it is difficult to argue the value of inhaling the additional 7000 harmful chemicals found in cigarettes in order to obtain that one molecule that may be acting to alleviate their symptoms. The bottom line is that cigarettes will kill people much faster than the ailment they are using cigarettes to medicate.

If clients are using smoking to self-medicate, an important consideration for any health practitioner should be “how can I provide them with better medication?”

This is the line of reasoning the Nicotine Dependence Clinic at CAMH uses with all clients, including those with severe mental illness who may be more prone to self-medicating in order to attenuate the problematic symptomology associated with their psychiatric illness. NRT can be used in a way that may be tolerated by those with a severe mental illness. The goal is always to “titrate to effect” which involves increasing the dose of nicotine replacement as the client gradually reduces their smoking until cessation is achieved (Williams and Hughes, 2003).

The danger of the self-medication hypothesis, especially in the context of severe mental illness, is that it may promote hesitation among clinicians to address cigarette use while the appropriate response should be how clinicians can supply clean nicotine to these vulnerable clients.


20. You mentioned a 16 hour patch (5, 10 and 15mg) at the previous webinar. Are you using the 16 hour patch at the Nicotine Dependence Clinic and what is the product name; cost difference etc.?

The Nicotine Dependence Clinic at CAMH is not currently using the 16 hour patch. The product name of the patch is the Nicorette Patch, which may be purchased on its own or as part of the Nicorette ComboQuit package, which includes both the patch and the gum. Since the package also includes the gum, it is substantially much more expensive than the regular patch. Please see the cost comparison chart below which illustrates the price points of the smoking cessation medications currently available vs. the price of cigarettes.
21. Must the nicotine patch be placed on the upper body or can it be placed anywhere?

According to Dr. Peter Selby (Head of the Nicotine Dependence Clinic at CAMH), the primary reason the manufacturers recommend placing the patch on the upper body is because this is where the patch was placed in clinical trials which evaluated the safety profile and efficacy of the patch. In addition, since the patch must be applied to a dry, non-hairy area on the body, it is more difficult to find these areas below the waist. Theoretically, the patch may be applied to any dry, non-hairy area on the body, including the lower body, with the understanding that absorption may vary according to (a) the underlying muscle mass, (b) where it is applied and (c) how long it can stick.

22. Given that the NRT mouth spray contains a small level of alcohol, is it safe to prescribe to patients recovering from an alcohol addiction?

According to a representative of the mouth spray manufacturing company, each spray bottle contains an alcohol equivalent to half a glass of wine (R. Dragonetti, personal communication, May 17, 2012). If abiding by the intended use of the product, the client should only administer a few sprays according to Rosa Dragonetti, manager of the Nicotine Dependence Clinic and Tobacco Control Projects at CAMH. However, there is potential for abuse of the product and for clients to administer more than needed if the alcohol is desired.

In addition, clients using Antabuse (i.e. Disulfiram) should be cautioned about the potential interaction between Antabuse and NRT mouth spray. Even a single spray has the potential to cause a reaction depending on the client’s sensitivity.
As with any other cessation treatment, clients should be monitored for positive and negative responses to medications and other therapies.

23. **How can I improve the adhesiveness of the NRT patch in clients suffering from hyperhidrosis (excessive sweating)?**

There are several possible solutions to this problem. First, Alexandra Andric (a nurse at the Nicotine Dependence Clinic) suggests that if the client is using a generic brand, they might consider switching to Nicoderm, as it offers improved adhesiveness as compared to the generic brands (personal communication, 2012). The client might also consider purchasing plastic surgical tape (approximately $5.00) and tape the patch to the skin. Another possible solution is purchasing a sweatband and placing the sweatband over the patch. For a more economical solution, the client can make their own sweatband by cutting the top of an old sock, which can then be placed over the patch.

*Please note that these suggestions were offered by TEACH-trained clinicians who subscribe to our Community of Practice Listserv*

24. **As a facility attempting to initiate a medical directive for NRT, are there any medical directives already in place at another institute that could be used as a reference?**

The following link will provide you with the CAMH Medical Directives:

[http://insite.camh.net/Policies_and_Forms/Medical_Directives_and_Delegations/medical_directives_delegations52074.html](http://insite.camh.net/Policies_and_Forms/Medical_Directives_and_Delegations/medical_directives_delegations52074.html)

For the two medical directives relevant to this question, please refer to the follow links:


For tips on how to structure, write, and revise a medical directive, please refer to the Medical Directive and Delegation Toolkit available on the CAMH website:


25. **Can NRT be sold outside of a pharmacy setting (for example, in hospital retail outlets such as a gift shop)?**

NRT products are currently sold exclusively in pharmacies. However, the NRT patch, gum, and lozenges are readily available over-the-counter so clients do not need a prescription to use most NRT products. The NRT inhaler does require a prescription from a practitioner healthcare
provider. Although not required, it is always advisable for clients to speak to their healthcare provider and/or pharmacist if they are considering using NRT, especially if they are on other medications and/or pregnant or breastfeeding.

The Ontario Medical Association (2008) released a paper recommending that NRT manufacturers should make NRT products available at every retail outlet where tobacco products are sold. In addition, the paper discussed that these NRT products should be displayed prominently in such retail outlets, as tobacco products are displayed (both currently and historically).


26. Directions on the NRT package recommend the client speak with their doctor before initiating NRT about the possible side effects and risk factors that may result from using NRT. Should professionals dispensing NRT ask clients to speak with their doctor or request a doctor’s letter covering all of these listed risks?

Organizations will approach this issue in different ways. At TEACH, we ask the practitioner to practice within their scope and to exercise discretion in terms of knowing when it is appropriate or necessary to consult with a doctor. The warnings and conditions listed on the manufacturer’s packaging are comprehensive and do not provide guidance pertaining to whether the conditions are active or inactive, treated or untreated. Therefore, clients should be monitored and assessed on an individual basis with additional consultation available if needed.

It is important to note, however, that if the client is taking medications, it is generally advised that they speak to their healthcare practitioner and/or pharmacist about how quitting smoking will impact their medications or their disease/condition so that planning can be tailored accordingly.

27. Where can I find empirical support for the addition of the NRT inhaler to our hospital formulary considering we currently offer the NRT patch and gum?

Empirical research has demonstrated that clients who use NRT to quit smoking are twice as likely to succeed as those who do not use NRT (Burkett, 2006; Schneider et al., 1996). The NRT inhaler is no exception. The nicotine inhaler is unique in that it mimics the sensorimotor aspects of smoking a cigarette, while providing much less nicotine, few side effects, and none of the other harmful chemicals found in cigarette smoke (Seed, DeBellis, & Sullivan, 2007). Empirical evidence has cited the NRT inhaler as particularly beneficial to clients who are reluctant to quit smoking, as the inhaler mitigates both the pharmacological and behavioural changes associated with smoking cessation (Burkett, 2006; Schneider et al., 1996). One study by Williams & Jones (2012), supported this finding by showing participants who used the inhaler actually administered less nicotine than the recommended dosage while experiencing similar success rates to those using the patch (which contains far more nicotine). It appears that the
hand-to-mouth action of smoking is an important piece of nicotine addiction, which is satisfied by the inhaler, but is not addressed by other NRT products.

**Personal Preferences: The Importance of Options**

Findings indicate that personal preference accounts for much of the variability in clients’ compliance with various smoking cessation tools, which, of course, influences the product’s efficacy (Schneider et al., 1996). One study compared the efficacy of NRT products and concluded that all forms of NRT products are equally effective but may be differentially effective for different types of smokers (Schneider et al., 1999). Another study by Williams & Jones (2012) furthered this finding by demonstrating that while the majority of participants preferred the patch, a significant percentage (one third) preferred the inhaler. The fact that a third of participants preferred the inhaler and that the success rates of these participants were equivalent to those using the patch lend support to the inclusion of the inhaler in a hospital formulary. Had the inhaler not been available to these participants, one third may not have enjoyed the same level of success seen in this study. In addition, some clients are unable to use certain forms of NRT or may experience uncomfortable side effects that reduce compliance (Seed, DeBellis, & Sullivan, 2007). For example, individuals with dentures or who have issues with their jaw cannot use the NRT gum while pregnant women are warned against using the patch in favor of more intermittent forms of NRT. Thus, a hospital that excludes the inhaler from its formulary may experience hindered success rates with specific clients who may have benefited from the inhaler as a smoking cessation aid.

**Flexibility in Combination Therapy**

Due to empirical findings supporting the use of combination therapy, best practice generally advises the use of a long-lasting NRT product in combination with a fast-acting, more concentrated nicotine delivery system, such as the inhaler or gum (Burkett, 2006). Further findings advocate for combining two acute NRT products, such as the inhaler and gum, with or without the patch (Schneider et al., 2001). Given the empirical documentation that clients have clear preferences when it comes to the different NRT products available, a hospital formulary that only includes one form of acute NRT (i.e. the gum) prevents client choice and ignores these important personal preferences. As well, it prevents healthcare practitioners from exercising flexibility in their administration of combination therapy. Moreover, a limited inventory of NRT products diminishes the likelihood that clients will be able to successfully beat their nicotine addiction and fails to take advantage of the effective smoking cessation aids currently available.


28. Is it safe to prescribe NRT to clients who have experienced a recent cardiac event?

The literature surrounding the safety of NRT treatment following a recent cardiac event (less than two weeks) is inconclusive. Given the lack of concrete evidence demonstrating the safety of NRT immediately following a cardiac event, clients with known cardiovascular disease are cautioned against using NRT without consulting a physician (Mills et al., 2010). Similarly, it is recommended that these clients be educated on the risks of NRT, given their cardiac history, and be offered intensive behavioural support as the first line of intervention.

Nicotine has the capacity to contribute to heart disease due to “the heart’s hemodynamic response to sympathetic stimulation and catecholamine release” (Burkett, 2006, p. 88). However, NRT delivers much less nicotine than cigarettes and this delivery occurs at a much slower rate (Ludvig, Miner, & Eisenberg, 2005). Both of these factors reduce the likelihood that NRT, when compared with smoking, will prompt a cardiac event. There is a dearth of empirical support for the belief that NRT increases cardiovascular risk. In fact, clinical trials of NRT in patients with stable Coronary Heart Disease have demonstrated no elevated cardiovascular risks. Another study (Meine et al., 2005) demonstrated the same results in patients with acute CHD (as cited in Reid, Mullen, & Pipe, 2011). Moreover, much of the literature suggests that the risks associated with NRT are low and that the benefits of quitting greatly outweigh these risks (Burkett, 2006; Ludvig, Miner, & Eisenberg, 2005).

A recent literature review by Reid, Mullen, and Pipe (2011) indicated that NRT may be initiated in hospitalized patients with stable CHD and should be considered in those with acute CHD if they are unable to quit without pharmacological assistance. NRT may also be useful for clients with acute CHD upon hospital discharge to prevent relapse, provided blood pressure and heart rate are stable. The underlying reasoning here, as discussed within the article, is that NRT may be preferable to cigarette smoking for those who develop cravings to resume smoking after hospitalization. Of the NRT products available, the patch is preferred over the acute NRT products (such as the gum or inhaler) because the slow delivery of nicotine poses the least cardiovascular risk (Ford & Zlabek, 2005; Ludvig, Miner, & Eisenberg, 2005). The 2000 Clinical Practice Guidelines recommend that health practitioners use NRT with caution among patients who have experienced a recent myocardial infarction, serious arrhythmias, and/or serious or worsening angina pectoris (Ford & Zlabek, 2005; Ludvig, Miner, & Eisenberg, 2005). For these clients, Bupropion has been cited within the literature as a safe and highly efficacious alternative to NRT (Ludvig, Miner, & Eisenberg, 2005).

It is important to recognize that all smokers, independent of whether they use NRT, are at greater risk of experiencing all of the cardiovascular events reported to be associated with NRT. In addition, empirical findings have failed to show that patients who use NRT suffer any increased risk, compared with those who continue to smoke.

In general, smoking cessation has demonstrated a far greater reduction in the risk of mortality (36% reduction) than other secondary prevention therapies that have been granted far more attention in the cardiac population, such as the use of statins (29%), aspirin (23%), beta-blockers (23%) or angiotensin-converting enzyme inhibitors (23%) (Reid, Mullen, & Pipe, 2011).
Given that 20% of the 1.1 million individuals affected by myocardial infarction (MI) each year are habitual smokers, it is especially important for healthcare practitioners working with this population to encourage smoking cessation in their practice (Ludvig, Miner, & Eisenberg, 2005). Patients affected by cardiac events may find these smoking cessation aids particularly effective as a result of the additional motivation to quit smoking provided by their tenuous medical status.


29. **Is it safe to use the ‘rule of thumb’: ~1mg NRT for each cigarette/day smoked?**

According to Williams and Jones (2012), the nicotine exposure from cigarette smoking is approximately 1 mg/cigarette. Therefore, while it is generally safe to replace ~1mg NRT for each cigarette/day smoked, client characteristics may render standard dosing inappropriate, for example, NRT dosing with pregnant or post-partum women (Coleman et al., 2011). Factors such as the NRT product used, type of smoker, health and age, and the cessation goals of the client may also impact the dose of NRT required (Seed, DeBellis, & Sullivan, 2007). Thus, it is important for healthcare practitioners to avoid resting on “one size fits all” formulas and ensure to personalize therapies according to individual client needs.


30. **Where can I find information regarding or samples of an organization’s algorithm for dispensing NRT and the accompanying policy, including the process for off-label administration of NRT?**

The CAMH algorithm for dispensing NRT follows the “5 As” intervention approach: Ask, Advise, Assess, Assist, and Arrange. The algorithm illustrates the intervention process in a step-by-step flow chart and outlines the various treatment options available (as well as when to use them).

The CAMH policies governing the provision of NRT are outlined in the following CAMH medical directives:

1) CAMH Medical Directive: [Delegation of Dispensing to RNs at the NDC](https://example.com) (January 2011)
2) CAMH Medical Directive: **Initiation of NRT by RNs and Pharmacists for CAMH Inpatients** (May 2011)

For tips on how to structure, write, and revise a medical directive, please refer to the Medical Directive and Delegation Toolkit available on the CAMH website:

http://insite.camh.net/Policies_and_Forms/Medical_Directives_and_Delegations/Medical_Directive_and_Delegation_Toolkit/medical_directive_delegation_toolkit52073.html

The 2008 OMA Position Paper “**Rethinking Stop-Smoking Medications: Treatment Myths and Medical Realities**” discusses the current thinking on off-label use of pharmacotherapy and dispels the myth that these medications must be used in strict accordance with manufacturer guidelines.

Bader, McDonald, and Selby (2009) also developed an empirically-based algorithm and guide for dispensing NRT and other tobacco cessation pharmacotherapies based on recommendations provided by the Delphi panel of international experts. The algorithm highlights the most reliable and current research available and reflects the strong empirical support at present for “off-label” upward titration of NRT or combination therapy, in special circumstances, as part of an individualized and responsibly monitored treatment plan.


The following algorithm may provide additional insight for clinicians hoping to learn more about off-label dosing in the context of smoking cessation practice:


**31. Is there a 4mg mouth spray or is it only available in the 1mg dosage?**

Currently, the mouth spray is only available in the 1mg dosage. However, the nicotine gum and lozenge are available in 4 mg doses.

**32. If a smoker has been using NRT for 12-16 weeks and has cut down to 7mg, can they continue using NRT or should they change to another pharmacotherapy?**

NRT product monographs recommend approximately two to three months of use, which is the length of time these products were used in early clinical trials. However, the Lung Health Study demonstrated that long-term NRT use is safe (Murray et al., 1996) and it is important to recognize that many patients are not ready to stop using NRT after three months (CAMH, 2009).


33. **If the spray is absorbed so quickly, is there a greater risk of dependence when compared to other NRT products?**

There is certainly a cost-benefit equation that must be applied to fast-acting NRT products. While these products may be more effective in promoting abstinence from tobacco products due to their fast-absorption, it has been well-documented within the literature that these products may be more likely to lead to dependence for the same reason they are so efficacious. In a study conducted by Hajek, McRobbie, and Gillison (2007), approximately 2% of smokers using the patch and 13% of smokers using the nasal spray tended to use these products long-term. The authors concluded that the difference between groups appeared unrelated to financial factors and were influenced mainly by the degree of nicotine dependence, which was likely influenced by absorption and exhibited by the extended use of NRT. The authors added that concerns surrounding the potential negative effects of long-term NRT use, unlike smoking, have not been supported by research. The fact is that cigarettes are a proven health hazard unparalleled by any other product on the market. Thus, from a health perspective, the prevention of relapse back to smoking is paramount.


34. **Is it dangerous for clients to continue using the NRT gum for years?**

The US Lung Health Study, the most extensive study to date on long-term NRT use, found that people who used NRT gum for an extended period of time did not experience an increased risk of developing health problems, including cardiovascular issues (Murray et al., 1996). In addition, findings showed that even concomitant smoking and NRT use for an extended period of time (i.e. 5 years) was not associated with increases in adverse health events.


35. **Must the NRT patch be placed on the upper body or can they be placed on the legs/lower body? SAME AS Q 21**

According to the NicoDerm CQ website, the patch may be placed anywhere on the body provided the area is clean and dry when the patch is applied. The reason manufacturers recommend placing the patch on the upper body is because the patch must be applied to a non-hairy area, away from joints, in order for the patch to stick to the skin properly. However, NicoDerm CQ did advise that the patch could be placed on other areas (such as the thigh, stomach, or back) if the area was suitable for the patch to stick properly.

36. *For prescribing bupropion, do we use the sustained release (SR) or the immediate release (IR) version?*

Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, advises clinicians to prescribe the sustained release (SR) rather than the immediate release version (IR) of bupropion. The regular version is the generic brand and tends to come on and off the market. Clinicians are advised against prescribing bupropion immediate release because it is associated with a greater risk of seizures when compared to bupropion sustained release due to the much faster absorption rate of bupropion into the body (Curran, Dhillon, & Yang, 2008; Moreira, 2011; Rissmiller & Campo, 2007). The product monograph indicates that, in general, the use of bupropion is unlikely to produce a seizure if the dose per tablet is less than 150mg or the daily total dosage is less than 300mg (Curran, Dhillon, & Yang, 2008; Moreira, 2011; Rissmiller & Campo, 2007). While the incidence of seizures under these circumstances is described 1 in 1000 on the product monograph, Dr. Peter Selby explains that the absorbed level is likely closer to 1 in 2000.


37. *Our psychiatrists are fearful of prescribing varenicline to their patients (even those who are in a stable psychiatric status). If accompanied with counselling, is varenicline a safe medication to use in patients with stable psychiatric status? Are there any studies that I can refer to support this?*

The observation that quitting smoking can have a destabilizing effect on patients is well-documented within the literature (Fagerstrom and Aubin, 2009; Broocks et al., 2002; Zullino et al., 2002; Desai et al., 2001). Despite this, Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, finds that clients with psychiatric diagnoses often report feeling much better when they quit smoking because their neuroleptics and antipsychotics work better in the absence of tobacco use. In fact, Dr. Peter Selby reports that clients sometimes require dose reductions because the medication begins to cause fatigue. All of the front-line smoking cessation medications (NRT, varenicline, and bupropion) have been found to be safe for use with the psychiatric population in both clinical practice and empirical research (Banham & Gilbody, 2010; McClure et al., 2010; P. Selby, personal communication, August 8, 2012; Purvis, Nelson, & Mambourg, 2010; Schroeder & Morris, 2010).
One issue that may arise when transitioning from cigarettes to NRT is a pharmacological issue; in which case problems may be more attributable to poorly treated withdrawal, inadequate dosing, or lack of counseling, than destabilizing medications.


38. How does a client know when they can think about stopping bupropion or varenicline? If they remain quit at 3 months, how do they know if it would be helpful to continue? Do you recommend a trial of discontinuing the medication or dose reduction?

Treatments are often time bound (usually a minimum of eight weeks) according to Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH. Given the notion that clients often need more than eight weeks of treatment, the Nicotine Dependence Clinic at CAMH has advocated that clinicians be able to provide up to 26 weeks of treatments, allowing greater flexibility in individualizing treatment.

To assess readiness to discontinue smoking cessation medications, Dr. Selby suggests exploring occasions in which the client forgot to take the medication (How did they manage? How long were they able to go without the medication?). Although this can be a powerful clinical indicator of clients’ readiness to discontinue pharmacotherapy, it can elicit defensiveness on part of the client and, in turn, dishonesty. For this reason, it is important for the clinician to emphasize the fact that they consider the client to be human and humans forget. This nonjudgmental approach is likely to encourage a more open and honest clinical discussion. Another important clinical indicator is whether the client has put themselves in every situation in which they would normally smoke and not felt the urge to smoke. The greatest determinant of a client’s readiness to discontinue medications is the identify shift in which the client begins to identify themself as a nonsmoker.

While these are all important indicators that the client may be ready to discontinue pharmacological treatment, clients are not recommended to discontinue these medications prior to an upcoming major stressful event or otherwise high risk situation which may prompt a relapse.
39. When bupropion for smoking cessation is not covered through a client’s private insurance, is it appropriate to order bupropion for depression (not sure if that would be covered either)?

According to Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, bupropion is often covered in clients with depression. If the client requires medication for the purposes of smoking cessation and also suffers from depression, bupropion would likely be indicated to satisfy both objectives. However, as health providers, it is unacceptable to advise clients to take actions which are unethical. Fabricating a history of depression to secure smoking cessation medication coverage is not highly recommended. Clinicians are advised to consider the negative implications this action may have on both the practitioner and the client (i.e. employability, future insurance coverage). According to Dr. Peter Selby (Head of the Nicotine Dependence Clinic at CAMH), clinicians should instead advocate on behalf of clients that private insurance companies cover the cost of the smoking cessation medications.

40. Some of my clients have been instructed by their pharmacist to avoid altering (reducing) their smoking pattern when starting varenicline prior to their quit date. Are these instructions correct?

Yes. The Patient Information Kit: My oneSTOP program provided by CHAMPIX (p. 15) indicates that the patient* should choose a quit date that falls within the second week of Champix treatment (between day 8 and day 14) to allow varenicline to accumulate within the body before the patient attempts to stop smoking. The varenicline product monograph specifies that there are two ways an adult client may set a quit date. The patient can either start varenicline 1-2 weeks before their quit date or quit smoking between week 2 and week 5 (or between days 8 and 35).

For important information the indications and clinical use of varenicline, please click the following link to view the product monograph provided by Health Canada:


*Varenicline is not recommended for use in patients under 18 years of age and patients over 65 years of age should be monitored for renal function*

41. Does varenicline or bupropion have a better a success rate?

A comprehensive literature review on bupropion and varenicline, developed by Johnson (2010), demonstrated that varenicline produces superior cessation rates at both 3 and 12 months compared to bupropion and/or placebo. In addition, varenicline 1-mg may be more effective in promoting long-term abstinence than varenicline 0.5-mg. While bupropion may be less effective than varenicline, according to these studies, the empirical evidence also demonstrates that bupropion is significantly more effective than placebo at both 3 and 12 months. However, these are the results of randomized controlled clinical trials and while they are highly internally valid, the results may not be generalizable to the smoking population as a whole. There are different
contraindications to use of all currently available cessation medications so a careful assessment of the patient is necessary in order to provide an informed clinical judgment as to what is the best pharmacotherapy option for an individual patient.


### 42. If a client is admitted to the hospital and is already on an antidepressant other than Bupropion, are physician’s advised to switch their prescription to Bupropion if the current antidepressant has been effective?

According to Pamela Kuduri M.D., M.M.E.D, a clinical fellow with the Addictions program at CAMH, physicians are not advised to switch clients to bupropion for the treatment of depression if the individual is already on an antidepressant that has been effective in treating their depression, *unless* bupropion is used to augment the antidepressant effects or to treat SSRI-induced sexual dysfunction et cetera (personal communication, July 30, 3012). With regards to smoking cessation, most inpatient settings (i.e. during hospitalization) opt to manage nicotine withdrawal through the use of Nicotine Replacement Therapies, not prescription smoking cessation medications such as bupropion.

### 43. What is the success rate of using 0.5mg BID of varenicline vs. 1mg BID?

In a study by Nakamura et al., (2007), participants evaluated the efficacy and dose response relationship of varenicline in Japanese smokers. In this double-blind, placebo-controlled, randomized, parallel-groups study, subjects were randomly assigned to received varenicline at 0.25 BID (n = 126) (twice a day), 0.5 mg BID (n = 128), 1mg BID (n = 124), or placebo (n = 132) for 12 weeks followed by a 40 week, nontreatment follow up phase. The primary efficacy variable was the continuous abstinence rate (CAR), defined as no reported smoking. The CAR for weeks 9-12 was significantly higher for all doses of varenicline in comparison to placebo. The highest CAR of 65.4% was achieved with Varenicline 1mg BID. The CAR for weeks 9-52 was significantly greater for varenicline 1mg BID than placebo (34.6% vs 23.3%). The CARs for week 9-24 at 0.25mg, 0.5mg and 1 mg BID were 33.6%, 35.2%, 37.7% respectively. For weeks 9-52 at 0.25mg and 0.5mg BID were 27.3% and 28.9%, respectively, but these rates failed to reach significance versus the placebo, 23.3%. *Based on these findings, varenicline was associated with dose dependent improvements in smoking abstinence rates during the last 4 weeks of treatment and in the longer term over 40 weeks of nontreatment follow-up. The dose associated with the highest efficacy was varenicline 1mg BID.*


### 44. Could you find the number needed to treat (NNT) data for varenicline and bupropion to show its efficacy in cessation?
Agboola and colleagues (2010) completed a comprehensive systematic review of the effectiveness of smoking relapse prevention interventions for abstinent smokers. The authors reported NNT data for pharmacological interventions at 3 distinct point prevalences: short (1-3 months post randomization), medium term (6-9 months) and long term (12-18 months).

Four studies assessed the efficacy of bupropion. In pool analysis, the authors reported only statistically significant effects. The estimated effect of treatment with bupropion reached statistical significance when assessed long-term (NNT = 11).

One trial of varenicline randomized abstinent participants who had received 12 weeks of open-label varenicline treatment to a further 12 weeks of varenicline or placebo, and detected a significant effect of varenicline in the short-term (NNT = 6) and medium term (NNT = 12) follow-ups. No data were available for longer-term follow-up.


**REDUCE-TO-QUIT**

45. **Would you advise the use of the NRT patch even with a client who continues to smoke, as part of a reduce-to-quit strategy?**

The labeling on the nicotine patch recommends that clients begin using the patch after they stop smoking. However, empirical studies are beginning to emerge documenting the potential efficacy of pre-cessation nicotine replacement therapy to help clients reduce their cigarette use prior to quitting. A study conducted by Rose and colleagues (2009) found that reductions in smoking only affected abstinence rates if clients used the patch as part of their reduction-to-quit strategy (as cited in Rose, 2011). Rose (2011) thus concluded that “pre-cessation reduction in smoking may only predict abstinence when reinforcement or dependence on cigarettes is attenuated due to the presence of a steadystate nicotine level provided by the patch” (p. 453). Moreover, while the labeling on the nicotine patch warns against pre-cessation NRT use due to fears of nicotine toxicity, there is a movement in the scientific community to have this labeling changed to reflect the emerging data which supports the efficacy of pre-cessation NRT use in promoting abstinence (Hajek, McRobbie, & Gillison, 2007; Rose et al., 2006).

46. Can we use bupropion and varenicline with the reduce-to-quit model or must these medications be used with a quit date in mind?

NRT is generally recommended to help clients reduce their smoking intake prior to quitting. However, preliminary empirical evidence has demonstrated the possible utility of bupropion and varenicline as pharmaceutical aids to the gradual cessation model. One study (Hatsukami et al., 2004) evaluated whether bupropion fostered smoking reduction prior to smoking cessation in clients who were unable or unwilling to quit smoking abruptly. The findings of this study demonstrated that the use of bupropion as part of a reduce-to-quit model was safe, fostered a reduction in smoking, and increased abstinence during treatment (but was not sustained upon termination of treatment). Another study (Hajek, 2011) evaluated the utility of varenicline as an aid to smoking reduction. This study found that initiating varenicline 4 weeks prior to quitting smoking (as opposed to the label instructions recommending only 1 week) reduced pre-cessation smoking intake, cravings to smoke, and subjective enjoyment of cigarettes. Varenicline preloading was also associated with significantly higher abstinence rates at 12 weeks. These findings lend support to the potential efficacy of varenicline as an adjunct to the reduce-to-quit model.


47. Should smokers who are using gum as a means of reducing to quit be using 2mg or 4mg gum?

A study conducted by Shiffman, Ferguson, and Strahs (2009) evaluated the safety and efficacy of the 2-mg and 4-mg nicotine gum in the context of a reduce-to-quit smoking cessation model. Smokers who opted to use the 4-mg gum tended to be heavier smokers and exhibited higher levels of nicotine dependency. During treatment, these smokers tended to self-administer more nicotine gum than smokers using the 2-mg gum. While heavier smokers may require higher doses of nicotine gum to satisfy their nicotine addiction, the two groups did not exhibit significant differences in terms of their rates of success or likelihood of experiencing an adverse event as a result of their gum use.

The results of this study showed that treatment with the nicotine gum (in either dose) led to greater reductions in smoking, higher levels of initial abstinence, and greater abstinence maintenance in both the short- and long-term, compared to a placebo control. In addition, concomitant nicotine gum use and smoking did not appear to increase the likelihood of an adverse event, compared to abrupt cessation. In fact, the study indicated no increase in adverse events even among those who engaged in the most concomitant smoking and gum use. For example, even participants who used 7 pieces of 4-mg nicotine gum (higher use than normal) and smoked an average of 18 cigarettes per day did not demonstrate a higher likelihood of experiencing an adverse event.
48. If you offer NRT to clients who are taking Zyban, do you monitor blood pressure? Does hypertension risk increase if the client is on Wellbutrin and receiving NRT?

According to Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, clinicians are always advised to monitor blood pressure when someone is taking bupropion (personal communication, August 8, 2012). The product monograph warns that bupropion use has been shown to increase blood pressure in certain individuals and Dr. Peter Selby suggests this effect is more pronounced in those taking bupropion in combination with NRT (personal communication, August 8, 2012). However, it should be noted that this blood pressure elevation is generally mild to moderate and has not been associated with serious cardiac events, such as a stroke. Wellbutrin and Zyban are the exact same product, which is bupropion (P. Selby, personal communication, August 8, 2012). Wellbutrin now comes in a once daily dosing, called XL, which has not been extensively tested for smoking cessation; most of the empirical studies have used bupropion sustained release (SR), which is a twice a day dosing. It is not recommended to exceed the 300mg daily dose of either Zyban or Wellbutrin due to the risk of seizures (although Dr. Selby acknowledges that some patients of the Nicotine Dependence Clinic at CAMH diagnosed with depression or other psychiatric conditions may receive a higher dose after careful consultation). Otherwise, Dr. Selby suggests the two drugs are essentially interchangeable.

49. What considerations should be made when considering the combined use of multiple smoking cessation medications?

It is important to consider that monotherapy is the cheapest smoking cessation method. Most medications should produce a partial response within approximately four weeks. Although recent findings suggest varenicline may take slightly longer in certain individuals (Kaur et al., 2009), the clinician should be able to gauge whether a medication is going to work based on this partial response following four weeks of treatment.

If a partial response is not achieved, Dr. Peter Selby suggests there are several possible explanations that the clinician should explore before prescribing additional medications (personal communication, August 8, 2012). First, the clinician may determine whether the client is taking the medication as prescribed (i.e. correct dose and correct usage). The clinician may also want to explore whether there is an emerging depression or depressive disorder that may have always been present but became more apparent upon cessation and may now be driving the client’s need to smoke. The clinician may also consider whether the prescribed dose is...
adequate for this particular client. Finally, the client’s environment and interpersonal relationship may need to be discussed to identify possible triggers and to develop strategies to manage or avoid these triggers.

If there are a number of behavioural factors that may be undermining the quit effort, combination therapy is not advised. Although no official guideline exists for combination therapy, unofficial guidelines advise clinicians to explore the possibility of combination therapy only when the client appears to be experiencing withdrawal symptoms despite following the instructions provided by the clinician (Bader, McDonald, & Selby, 2009).

There are many approaches to increase the efficacy of smoking cessation medication if the clinician and client agree more pharmacological aid is required. If the client is using the patch, the clinician may choose to increase the dosage of the nicotine patch or recommend a breakthrough NRT product, such as the nicotine gum, lozenge, or inhaler (Bader, McDonald, & Selby, 2009). The clinician may consider prescribing bupropion in addition to the nicotine patch, or vice versa, especially if there is also a complaint of depression or low mood (Ebbert, Hays, & Hurt, 2010; Hudmon, Corelli, & Prokhorov, 2010). Combination therapy involving varenicline is more controversial and more complex, according to Dr. Selby. Given that 1mg dose of varenicline occupies approximately 95% of nicotinic receptors, it is debatable whether the drive to smoke is an issue of pharmacology or learned behaviour. Clinicians can begin to discriminate the cause of relapse by asking clients to describe a situation in which they might decide to smoke as well as their experience of the smoking itself. If the client seems to smoke when triggered and reports the experience of smoking as less satisfying than usual, the issue is more likely behavioural than pharmacological. Preliminary studies combining varenicline with NRT and varenicline with bupropion have produced encouraging results (Ebbert, Burke, Hays, & Hurt, 2009; Ebbert, Hays, & Hurt, 2010). However, these combinations have yet to receive the empirical testing necessary to confirm either the safety or efficacy of this practice. Nevertheless, these findings demonstrate the potential benefit of prescribing varenicline to clients already receiving bupropion for the treatment of depression.


50. If smoking is permitted until day 12 while taking varenicline, would it also be safe then to recommend taking NRT oral products (2mg or 4mg) during this time?

The two-week upward titration phase is intended to allow varenicline to reach a steady state level in the body prior to quitting smoking (Kaur et al., 2009). The idea is that as varenicline gains occupancy over nicotinic receptors, the smoker will derive increasingly less pleasure from the cigarette. As the expectancy for a pleasure-response is continually thwarted (because
varenicline has prevented the receptor from being activated), the association between cigarettes and pleasure deteriorates, and the smoker learns that cigarettes are not satisfying. This learning is the central mechanism by which varenicline achieves such high abstinence rates. Therefore, Dr. Peter Selby, Head of the Nicotine Dependence Clinic and CAMH, recommends that unless there is a compelling reason to stop smoking abruptly upon initiating varenicline, clients should continue smoking during the titration phase (personal communication, August 8, 2012).

If the client insists on stopping smoking immediately, they may substitute smoking with the use of a breakthrough NRT product (i.e. gum, lozenge). However, the product monograph for varenicline predicts this combined treatment is unlikely to provide added benefit. Consistently, Dr. Peter Selby suggests the effect would likely be placebo, if anything, as almost all receptors in the brain are occupied by varenicline. Thus, his clinical opinion would be that this technique may increase the cost of treatment without providing any real added benefit.


51. Where can I find an up-to-date list of medications that interact with varenicline?

The product monograph for varenicline (found on the Health Canada website) provides an overview of the drug interactions associated with varenicline.

- **Cimetidine** and other inhibitors of hOCT2 should not be combined with varenicline in patients with severe renal impairment

- **Warfarin** did not appear to interact with varenicline. However, smoking-cessation itself may prompt changes to Warfarin pharmacokinetics.

For more information regarding possible drug interactions associated with varenicline, please proceed to the Health Canada website to access the varenicline product monograph:


52. Where can I find an up-to-date list of medications that interact with smoking?

The British Columbia Ministry of Health website offers a chart detailing some of the most common drug interactions associated with tobacco use:


In addition, this site offers several other useful resources developed for pharmacists that may be helpful to all practitioners providing smoking cessation therapy, including information about Quit Now, documentation guides, effective pharmacological aids to smoking cessation, videos, and general information, tips, and strategies. All these resources and more can be found by clicking the following link:

53. Have any studies tested NRT use in combination with CHAMPIX or Zyban?

Several studies have demonstrated the safety and effectiveness of NRT with bupropion and preliminary data is beginning to emerge supporting the use of NRT in combination with varenicline. Empirical evidence suggests that combination therapy involving the nicotine patch and bupropion is more effective than either agent alone and has been FDA approved as a tobacco cessation treatment in the United States (Ebbert, Hays, & Hurt, 2010; Hudmon, Corelli, & Prokhorov, 2010). While combination therapy is still considered “off label,” controlled trials have produced encouraging results on the utility of bupropion both in combination with the other four types of NRTs as well as in combination with up to three NRT agents at once (e.g. the inhaler, patch, and nasal spray; as cited in Hudmon, Corelli, & Prokhorov, 2010). Although research on the use of varenicline in combination therapy is still in its infancy, initial findings suggest that NRT may be useful in relieving withdrawal symptoms of patients while they are being titrated up on varenicline (Ebbert, Burke, Hays, & Hurt, 2009). As well, since varenicline neither completely saturates nicotine receptors nor completely replaces the dopaminergic effect of smoking, it has been suggested that NRT use may improve the abstinence rates of varenicline by relieving these lingering withdrawal symptoms and cravings to smoke (Ebbert, Hays, & Hurt, 2010).

For a comprehensive and up-to-date literature review on combination therapy in smoking cessation, please refer to Ebbert, Hays, and Hurt’s (2010) article, “Combination pharmacotherapy for stopping smoking: What advantages does it offer?”


54. Is varenicline dangerous for patients who are already on several different medications (7-10 on average) and can it act to destabilize these patients?

According to the product monograph, varenicline is unlikely to interact with other medications, based on both its pharmacokinetic characteristics (unlike most drugs, it is not metabolized by the liver and is mostly excreted unchanged in the urine) and findings from clinical trials. The only clinically meaningful drug interaction with which varenicline has been associated is with cimetidine in the context of severe renal impairment.

Several studies have added to this body of literature, indirectly, by documented the safety and efficacy of varenicline in patients whose health status likely requires the combined action of several different medications, such as patients with mental illness or cardiovascular disease (McClure et al., 2010; Purvis, Nelson, & Mambourg, 2010; Rigotti et al., 2010). Although there has been trepidation among clinicians to prescribe varenicline to these patients, findings show it is generally well-tolerated and has not been associated with an increase in adverse events in
these high-risk populations. However, given these warnings, all patients should be closely monitored for sudden changes in mood and/or suicidal ideation while on varenicline.


55. In patients who are depressed and already on a SSRI, is bupropion 150 mg daily the maximum amount that should be used in combination with the SSRI or is 150 mg BID also appropriate?

According to Pamela Kuduri M.D., M.M.E.D, a clinical fellow with the Addictions program at CAMH, the addition of Bupropion to an SSRI is relatively safe. The clinical guidelines recommend prescribing bupropion SR 150-mg o.d. for the initial three days and then titrate up to 150-mg b.i.d. as per smoking cessation protocol. The only pharmacological contraindication of bupropion is the concomitant use of MAOI or another medication containing bupropion. Physicians are recommended to continue prescribing 150-mg o.d. if the upward titration to 150-mg b.i.d. is not well-tolerated and the patient begins to experience uncomfortable side effects, such as insomnia (despite spacing doses 8 hours apart).

**E-CIGARETTES**

56. Is Ciganot safe and can it be recommended to clients who are seeking hand-to-mouth stimulation but do not wish to use the NRT inhaler?

Ciganot Smokeless Cigarettes are advertised as a safe and effective alternative to smoking. However, *Ciganot has yet to be empirically tested or approved as a smoking cessation aid*. The product does not expose the user to the smoke, nicotine, tar or other harmful chemicals of a cigarette. Instead, the plastic cigarette replica releases a smoky taste as air is drawn from the white cylinder. The Canadian company advertises the use of Ciganot to supplement NRT (such as the patch) to satisfy the hand-to-mouth behavioural component of smoking without exposing the user to additional nicotine.

Please refer to the following links for more information on Ciganot Smokeless Cigarettes:

http://ciganot.com/
http://www.quit-tobacco-today.com/quit-tobacco-programs/ciganot.html
57. Are there any smoke-free inpatient facilities that include E-cigarettes as part of their NRT treatment or must they be returned with the family upon admission?

In Canada, while the importing, advertising, and selling of electronic cigarettes is illegal, the use and ownership of electronic cigarettes (though advised against by Health Canada) is not. Thus, a smoke-free inpatient facility would not be legally obligated to confiscate the electronic cigarettes from a client upon admission.

Although a facility cannot confiscate clients’ electronic cigarettes should they choose to use them, these products would not be considered part of their NRT treatment. Due to the lack of empirical evidence to support the safety of electronic cigarettes or their effectiveness as a tobacco cessation aid, Health Canada does not recognize their use as a valid form of NRT and advises against their use. In light of these concerns, the inpatient facility may choose to inform the client of the potential risks associated with electronic cigarettes and the lack of empirical testing associated with their use in order to foster informed decision-making and client self-determination.

To access Health Canada’s Advisory against the use of electronic cigarettes, please click the following link:


The following article by the World Health Organization “Marketers of electronic cigarettes should halt unproved therapy claims” offers an explanation for why regulatory bodies refuse to designate electronic cigarettes as a form of NRT. Although outdated, citing that electronic cigarettes are sold in Canada (which has since been made illegal), the arguments against designating electronic cigarettes as a tobacco cessation aid are still relevant today. To access this article, please click the following link:


58. If e-cigarettes were regulated, could they potentially be used as another form of NRT?

The main reason Health Canada does not recognize the e-cigarette as a viable smoking cessation aid (and, in fact, warns against their use) is because, unlike NRT products, the e-cigarette has not received the empirical testing necessary to demonstrate either its safety or efficacy as a treatment for nicotine addiction. Thus, until sufficient empirical evidence exists to confirm that e-cigarettes are safe and effective in helping people quit smoking, Health Canada is not likely to recommend e-cigarettes be adopted as a formal smoking cessation aid.

Furthermore, it is unclear whether these products are even designed to treat nicotine addiction or promote abstinence. Marketing campaigns have largely promoted e-cigarettes as a “safe” alternative to smoking, which not only promotes the idea that smoking is safe but acts to maintain the nicotine addiction. Smoking e-cigarettes, while potentially safer to surrounding nonsmokers, may nevertheless role-model smoking behavior to children, under a dangerous guise of safety. Therefore, the intended use of e-cigarettes, while under debate, may stand in
direct opposition to public health efforts aimed to treat nicotine addiction and encourage abstinence. To access Health Canada’s Advisory against the use of electronic cigarettes, please click the following link:


The following article by the World Health Organization “Marketers of electronic cigarettes should half unproved therapy claims” offers an explanation for why regulatory bodies refuse to designate electronic cigarettes as a form of NRT. Although outdated, claiming that electronic cigarettes are sold in Canada (which has since been made illegal), the arguments against designating electronic cigarettes as a tobacco cessation aid are still relevant today. To access this article, please click the following link:


59. Do e-cigarettes contain alcohol?

E-cigarettes are not regulated. Therefore, different brands of e-cigarettes may contain different ingredients in varying proportions. As well, because these products are unregulated, it is virtually impossible to ensure the exact contents of e-cigarettes or the safety profile of these contents.

SMOKELESS TOBACCO

60. Is it appropriate to apply our knowledge about addiction, withdrawal and cessation interventions involving cigarettes to clients who are addicted to smokeless tobacco products?

Until recently, it was expected that the management of smokeless tobacco addiction could be translated directly from the intervention strategies found to be effective in cigarette smokers (Ebbert & Fagerstrom, 2012). However, the growing body of empirical literature on smokeless tobacco users has demonstrated distinct and clinically relevant differences between smokeless tobacco users and cigarette smokers. Quickly becoming evident is the need to recognize smokeless tobacco users as a different population of tobacco users from cigarette smokers, requiring a slightly different clinical approach.

Clinical Interventions

Behavioural Therapy

Much of the empirical literature recommends the use of the same behavioural approaches utilized for smokers to treat smokeless tobacco users (Ketterman, Scott, & Smith, 2005). The controversy within the scientific community exists around the efficacy of smoking cessation pharmacotherapy when used to treat smokeless tobacco addiction (Arabi, 2007; Ebbert & Fagerstrom, 2012; Ketterman, Scott, & Smith, 2005).
Education and counseling should be the basis of any comprehensive tobacco cessation intervention, as they serve to build clients' motivation to quit (Arabi, 2007). Education may be even more powerful when working with smokeless tobacco users due to the relative lack of awareness surrounding the health risks associated with smokeless tobacco products compared to cigarettes (Arabi, 2007; Borland et al., 2011). For example, empirical research has found that there is a widespread perception that smokeless tobacco use is a safer alternative to smoking cigarettes (Borland et al., 2011). This is especially apparent among women and people of low socioeconomic status. However, the use of smokeless tobacco, like cigarettes, often leads to nicotine dependence and causes similar withdrawal symptoms upon cessation (Ketterman, Scott, & Smith, 2005). Smokeless tobacco use is associated with serious health consequences, such as periodonatal disease, leukoplakia, cancer, and possibly cardiovascular disease. Given the emerging evidence that smokeless tobacco may serve as a “gateway” drug to smoking, it is especially important not to minimize the health consequences of smokeless tobacco (Arabi, 2007). Healthcare practitioners who provide their clients with physical exams may benefit clients by discussing oral health, taking advantage of this opportunity to provide information about the oral consequences of smokeless tobacco use. The five “A”s, a counseling approach widely used to treat cigarette smokers, is also recommended as a highly effective intervention strategy for smokeless tobacco users. This strategy prompts the healthcare practitioner to Ask about tobacco status each visit, Advise to quit, Assess willingness to attempt quitting, Assess method of quitting, and Arrange follow-up.

Pharmacotherapy

While the behavioural approaches used to treat cigarette smokers have been established as effective intervention strategies, in the context of smokeless tobacco cessation, the utility of smoking cessation pharmacotherapy with smokeless tobacco users is more controversial. Empirical findings on the efficacy of these pharmacological agents when applied to smokeless tobacco users have been inconclusive (Arabi, 2007; Ebbert & Fagerstrom, 2012; Ketterman, Scott, & Smith, 2005). Overall, NRT seems to reduce withdrawal symptoms and improve short-term abstinence rates, but most clinical trials are unable to show that NRT use is associated with any improvement in long-term abstinence rates (Arabi, 2007; Ebbert et al., 2007; Ebbert & Fagerstrom, 2012; Ketterman, Scott, & Smith, 2005). Bupropion, on the other hand, seems to attenuate weight gain and reduce tobacco cravings, but also fails to impact abstinence rates in smokeless tobacco users (Arabi, 2007; Ebbert & Fagerstrom, 2012). Varenicline has achieved far greater success with this population and has been empirically shown to improve long-term abstinence rates in smokeless tobacco users (Ebbert & Fagerstrom, 2012).

*For more information on the efficacy of pharmacotherapy in smokeless tobacco users, please refer to the next question: “Can I use NRT for patients using smokeless/chew tobacco? If so, where can I find information on dosing?”*

The management of smokeless tobacco addiction has largely relied on the translation of intervention strategies found to be effective in cigarette users (Ebbert & Fagerstrom, 2012). Unfortunately, empirical findings have failed to show that pharmacological interventions enjoy the same efficacy in smokeless tobacco users as in cigarette smokers (Arabi, 2007). Empirical support for the use of NRT and Bupropion has been especially limited, while varenicline has demonstrated greater success with this specific population of tobacco users (Arabi, 2007; Ebbert & Fagerstrom, 2012).

Research examining the effectiveness of NRT has found that the nicotine gum reduces withdrawal symptoms but does not impact abstinence rates (Ebbert & Fagerstrom, 2012). The nicotine lozenge and patch also reduce symptoms of nicotine withdrawal, but these aids have shown to improve short-term abstinence rates as well. While Bupropion seems to attenuate post-cessation weight gain and decrease tobacco cravings associated with abstinence, findings have failed to demonstrate any significant increase in abstinence rates among those using Bupropion, as compared to controls. Varenicline, however, has demonstrated more utility within this population and is the only pharmacological intervention shown to improve abstinence rates of smokeless tobacco users in the long term.

*Note: To skip to NRT dosing considerations for Smokeless Tobacco Users, please directly refer to the heading “Inadequate Dosing of NRT in Smokeless Tobacco Users” below*

**Behavioural Interventions May Be Sufficient for Smokeless Tobacco Users**

Some studies suggest that cigarette smoking is governed by far more broad and complex behavior than smokeless tobacco use and that pharmacological intervention may not be necessary or appropriate to achieve abstinence in this population (Ebbert & Fagerstrom, 2012). In fact, many studies have demonstrated that smokeless tobacco users may not derive any additional benefit from the introduction of pharmacotherapy compared to behavioural counseling alone (Arabi, 2007; Ebbert & Fagerstrom, 2012; Ketterman, Scott, Smith, 2005).

**NRT and Smokeless Tobacco Products May be Too Similar**

It has been hypothesized that NRT may be less effective for smokeless tobacco users than for cigarette smokers because the mechanisms of use are more similar between NRT and smokeless tobacco products than between NRT aids and cigarettes (Arabi, 2007; Ebbert & Fagerstrom, 2012). It seems NRT use may reinstate the desire to use smokeless tobacco products more than the desire to use cigarettes because there is a stronger association...
between the two products; an association which may prompt relapse. This hypothesis is consistent with previous findings which demonstrated most cigarette smokers opt against using the NRT inhaler because of its similarity to smoking and, thus, potential to intensify cravings for the ‘real thing’ (Williams & Jones, 2012).

Inadequate Dosing of NRT in Smokeless Tobacco Users

It is possible that smokeless tobacco users under-administer NRT and, thus, do not receive high enough doses of nicotine replacement for the NRT product to be effective (Ebbert & Fagerstrom, 2012). The general rule of pharmacological intervention when working with either cigarette or smokeless tobacco users is the same: use the lowest effective dose. Empirical findings have demonstrated there is a dose-response relationship between higher NRT doses and a reduction in nicotine withdrawal symptoms (Ebbert et al., 2007).

Dosing Recommendations

While NRT doses up to 63 mg/day have been shown to be effective in selected cigarette smokers (Benowitz, Zevin, & Jacob, 1998), dosing recommendations for smokeless tobacco users are limited due to the dearth of research confirming the effectiveness of NRT in this population (Ketterman, Scott, & Smith, 2005). Nevertheless, dosing recommendations up to 42 mg/day of the nicotine patch have been published for the treatment of smokeless tobacco addiction (Ebbert et al., 2007). As well, clinical trials using nicotine patch doses from 55 mg/day to 66 mg/day established that these doses were both well-tolerated in smokeless tobacco users and efficacious in achieving long-term abstinence. The report emphasized the importance of appropriately tailored NRT (i.e. higher dosing for heavier users) to achieve abstinence long-term.

Dr. Herb Severson from the Oregon Research Institute, developed a Spit tobacco algorithm in 2010 which provides dosing recommendations for the NRT patch, gum and lozenge. If you are interested in using an NRT dosing algorithm with your clients who use smokeless tobacco, you can access the algorithm here.


62. Are there any resources available online to help clients quit chewing tobacco?
My Last Dip is an excellent resource for individuals interested in stopping their chewing tobacco use. The website offers free motivational videos, interesting links, and informative articles. From the My Last Dip website, chewing tobacco users can access a series of web-based interventions that are age-specific and research-tested to help people quit chewing tobacco.

To access these resources, please proceed to the My Last Dip website: http://mylastdip.com/

63. Does chew tobacco improve athletic performance?

Chew or smokeless tobacco use is predominant among athletes due to the widespread belief that tobacco use increases alertness, response time, and overall athletic performance (Alberta Health Services, 2012; Schroeder, 1997). However, empirical findings have failed to support this belief. In fact, many studies have demonstrated that nicotine can actually hinder athletic performance (Alberta Health Services, 2012; Murphy, 2002; Schroeder, 1997).

Nicotine is a stimulant and acts to increase heart rate and blood pressure minutes after entering the body (Alberta Health Services, 2012). While many people believe that smokeless tobacco is safer than smoking cigarettes, the nicotine derived from a cigarette reaches the brain within seconds while the nicotine in chew tobacco enters the bloodstream directly through pores in the mouth. In fact, many types of chew tobacco contain imperceptible pieces of glass that make tiny cuts in the mouth for an even faster delivery of nicotine into the bloodstream. Given that exercise naturally increases heart rate and blood pressure, the artificial stimulatory effects of tobacco place even greater (and potentially dangerous) stress on the heart, thereby accelerating exhaustion, reducing athletic performance, and even increasing the risk of heart attack (Alberta Health Services, 2012; Murphy, 2002). The nicotine in chew tobacco, like the carbon monoxide from cigarettes, slows muscle contraction and, thus, response time (Murphy, 2002).

Studies have shown that smokeless tobacco users perform more poorly on visualmotor tasks, compared to athletes who do not use tobacco (Alberta Health Services, 2012). It seems that learning speed, response to new visual stimuli, and general motor accuracy are also significantly reduced by the use of smokeless tobacco. In addition, smokeless tobacco users suffer more muscle jerks and generally slower, more irregular movements compared to non-users.

In terms of physical training, smokeless tobacco users are at a disadvantage for at least two reasons. First, tobacco interferes with the athlete’s capacity to gain muscle by hindering optimal testosterone production (Alberta Health Services, 2012). Second, tobacco use compromises cardiac function during cardiovascular activities, reducing the overall aerobic benefits of any given aerobic exercise 10-20 percent (Murphy, 2002). Moreover, tobacco also interferes with the way the body breaks down food. Therefore, the healthy diet any serious athlete strives to maintain is actually being depleted of many of the nutritional benefits that foster muscle conditioning and athletic performance.
Due to the disproportionate number of athletes using smokeless tobacco and the mounting evidence showing that tobacco reduces athletic performance, coaches can increase the physical performance and health of players by introducing chew tobacco education. For more information, please access "A Coach’s Guide to Spit Tobacco Education" available online to take advantage of the current information, activities, and interesting handouts provided in 9 different modules.

http://www.albertahealthservices.ca/1712.asp

An informative article, titled “Kicking butts: Forget for a moment all that stuff about cancer – that’s tomorrow. Smoking can screw up your workout today!” highlights several ways in which tobacco use can hinder athletic performance.


64. Is it against the law for a hospital to be in possession of contraband cigarettes (handed in by clients upon admission) and for hospital staff to dispense these cigarettes back to the client for their smoke break?

The following answer was generously provided by Sergeant Michael Harvey, the Customs Policy Analyst for the RCMP:

“Under authority of Section 32(1) of the Excise Act, 2001, no person shall sell, offer for sale or have in their possession a tobacco product unless it is stamped. It is therefore against the law to be in possession of unstamped tobacco products. The punishment located under section 216 of the Act indicates that every person who contravenes section 32 is guilty of an offence and liable:

(a) on conviction on indictment, to a fine of not less than the amount determined under subsection (2) and not more than the amount determined under subsection (3) or to imprisonment for a term of not more than five years, or to both; or

(b) on summary conviction, to a fine of not less than the amount determined under subsection (2) and not more than the lesser of $500,000 and the amount determined under subsection (3) or to imprisonment for a term of not more than 18 months, or to both.
The *Excise Act, 2001* can be located online at:


You can tell if the product is illegal by noticing the following:

- A tear strip or stamp must appear on packages of cigarettes and pouches of tobacco, which indicate the manufacturer, paid the duties.
- The name and address or permit number of the manufacturer must also appear on the packaging.

The consequences of dealing in illegal tobacco products are serious. Offenders are liable to substantial fines, confiscation of their property (including money, boats, vehicles and homes) and a prison term of up to five years pursuant to the *Excise Act, 2001* and any other provincial legislation.”

(M. Harvey, personal communication, June 29, 2012)

For more details, please refer to the RCMP brochure titled ‘*Contraband Tobacco Injects Criminal Activity Into Our Communities*’ located on the RCMP Website:


For further information on illicit tobacco products, please refer to the RCMP Website:


65. **What are some strategies hospitals can implement in order to prevent nurses from having to hold and dispense contraband cigarettes belonging to patients?**

Given that it is illegal to be in possession of contraband cigarettes, to avoid legal sanction, nurses should not agree to hold or dispense contraband cigarettes. Sergeant Michael Harvey, the Customs Policy Analyst for the RCMP, suggests that hospitals implement a policy which warns patients that no illicit tobacco products are permitted on the hospital premise. The policy should also advise patients that if these products are located, they will be confiscated and disposed of immediately upon discovery. By clarifying professional and legal obligations, the hospital acts to support its staff and prevent misunderstandings, as well as to reduce the likelihood of backlash from patients. In addition, once such a policy is put in place and patients understand that illicit tobacco products will be disposed of upon admission, these patients will be less likely to arrive with these products in the first place.

Sergeant Harvey warns hospital staff that even before such a policy is initiated, the law dictates that they must dispose of illegal tobacco if they come into possession of it. Small amounts may be disposed of by hospital staff and must be done so in such a way as to ensure the products cannot be used again. To dispose of larger amounts, however, hospital staff may contact the
Ontario Ministry of Finance 24/7 at 289-404-3541 or the local RCMP detachment at 905-876-9500 who will be able to assist with the disposal of the contraband products. (M. Harvey, personal communication, June 29, 2012)

# SPECIFIC POPULATIONS

## 66. What percentage of smokers do you think are also suffering from ADHD and/or smoke as a means to self-medicate and manage their ADHD?

There is an association between ADHD and early smoking as an attempt to self-medicate which has been documented in the literature (McClernon and Kollins, 2008; Wilens et al., 2006; Levin et al., 1996). ADHD is a diagnosis of exclusion (i.e. in order to diagnose ADHD, all other diagnoses must be ruled out). This means that ADHD cannot be diagnosed if there is a comorbid anxiety disorder or, of particular relevance, when the client is undergoing withdrawal. Bupropion has been used to treat ADHD and in the context of smoking cessation (Greenfield and Hechman, 2007; Wilens et al., 2001).

In order to assess the potential presence of ADHD in clients undergoing smoking cessation in the absence of a formal diagnosis, Dr. Peter Selby (Head of the Nicotine Dependence Clinic at CAMH) recommends asking clients “what happens to your concentration when you quit smoking and how long does it take to come back once you start smoking again?” If clients respond that they lose the ability to concentrate for weeks and that their concentration only returns once they resume smoking, this serves as a strong indicator that they may be suffering from undiagnosed ADHD.


## 67. Is the reduce-to-quit strategy recommended for pregnant women or persons with mental health issues who are ready to use NRT?

### Pregnant Women

Currently, there is no smoking cessation strategy recommended for pregnant women with respect to pharmacological interventions that has been empirically supported by research.
(Slotkin, 2008). Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, warns clinicians that when women reduce their smoking while pregnant, they begin to exhibit compensatory behaviours such as smoking more efficiently and misleadingly or consuming equal and/or even greater amounts of nicotine (personal communication, August 8, 2012). Clinicians, therefore, should engage clients in a discussion about NRT paired with the reduce-to-quit model to ensure pregnant women avoid receiving a double dose of nicotine, which has shown to be harmful to the developing fetus (Ginzel et al., 2007; Slotkin, 2008). Another concern pertaining to the reduce-to-quit model with pregnant women is that cessation often takes approximately 4-9 months (P. Selby, personal communication, August 8, 2012). Given that most women do not discover they are pregnant right away, Dr. Selby suggests this narrow time window may not allow enough lead time to achieve cessation before the birth.

Some women may wish to quit following the birth of the baby due to fears that the stress of pregnancy may hinder the quitting process. According to Dr. Selby, this is problematic for two reasons (personal communication, August 8, 2012). First, it is an illusion; babies are stressful. Postponing the quit date until after the baby is born is unlikely to ease the quitting process and may actually have the opposite effect as the reality of parenthood sets in. Second, smoking is extremely harmful to the developing fetus, as well as to children. Thus, pregnant women should attempt to quit smoking as soon as possible during pregnancy in order to limit the developing fetus’ exposure to the harmful chemicals in cigarette smoke.

Despite these concerns, Dr. Selby affirms that the reduce-to-quit model has been successfully employed with pregnant women suffering from multiple morbidities at the Nicotine Dependence Clinic at CAMH. During the intake process, clients are asked how quickly they want to stop smoking and the clinician implements a treatment plan based on the feedback and wishes of the client, taking care to inform clients of the risks associated with their decisions.

**Individuals Diagnosed with Severe Mental Illness**

According to Dr. Selby, clinicians actually developed the reduce-to-quit model based on smoking reduction behaviour they observed among their clients with schizophrenia who were receiving smoking cessation treatment (personal communication, August 8, 2012). Thus, at the Nicotine Dependence Clinic at CAMH, clinicians will implement gradual smoking cessation therapy with the psychiatric population in combination with careful supervision and support. However, the reduce-to-quit model can be significantly more expensive since clients are often purchasing cigarettes and smoking cessation medication. As well, gradually reducing one’s smoking is likely to take significantly longer before abstinence is achieved than quitting abruptly, which further contributes to the financial burden of the reduce-to-quit option. Finally, if treatment is limited by narrow time window, the reduce-to-quit model may not be a feasible or appropriate intervention strategy.


68. Can I offer NRT to pregnant women and adolescents? If so, what resources can I refer to for further information (i.e. dosing)?

Generally speaking, when working with pregnant or adolescent clients, healthcare practitioners should always opt for nonpharmacological smoking cessation therapies, such as behavioural counseling, before considering the use of NRT or any other smoking cessation medication (Briggs, 2008; Coleman et al., 2011). These therapies pose the least risk during these critical stages of development and have shown to be effective in helping clients quit smoking (Coleman et al., 2011; Ginzel et al., 2007).

Although healthcare practitioners may offer NRT to pregnant and adolescent clients, the use of NRT in these populations is controversial (Briggs, 2008). In terms of a health practitioner’s professional obligations, at CAMH, as long as the client is over 16 years of age, they may opt to use NRT as a smoking cessation aid (CAMH: STOP, personal communication, May 2012). If the client is under 16 years of age, the healthcare practitioner is entitled to use his or her discretion in prescribing NRT.

While NRT use is proven to be both safe and effective for the general population, empirical findings have failed to demonstrate either of these criteria in the context of pregnancy or adolescence (Slotkin, 2008). The CAMH Medical Directive at CAMH cites pregnancy and lactation as a contraindication for NRT use. However, the directive also states that this contraindication is not absolute, due to recent studies which indicate that NRT use is safer than smoking, but advises healthcare practitioners to consult with a primary care clinician or physician on call before administering NRT to these groups.

To access CAMH Medical Directives, please refer to the following link:

http://insite.camh.net/Policies_and_Forms/Medical_Directives_and_Delegations/medical_directives_delegations52074.html

Risks of Nicotine Exposure

On the whole, the intake of “clean nicotine” provided by NRT products is believed to be safer than smoking, which exposes the user to over 3,000 harmful chemicals in addition to nicotine (Briggs, 2008). However, empirical findings are showing that nicotine specifically may be the chemical responsible for the observed consequences of smoking on development; prenatally, in infancy, and in adolescence (Ginzel et al., 2007; Slotkin, 2008). Therefore, although NRT is generally safer than smoking cigarettes, its use in adolescents and pregnant women is likely to cause some of the same permanent and deleterious disruptions to development as smoking (Briggs, 2008; Slotkin, 2008).

Prenatal Exposure

It should be noted that the concentration of nicotine in the fetal brain is 15% higher than that in the maternal blood (Ginzel et al., 2007). The developmental damage caused by prenatal exposure to smoking has both immediate and delayed consequences (Briggs, 2008; Ginzel et al., 2007; Slotkin, 2008). The immediate consequences include, “spontaneous abortions,
intrauterine growth retardation and perinatal deaths, and Sudden Infant Death Syndrome” while the delayed consequences include, “subsequent learning disabilities, cognitive dysfunction, behavioral problems, attention deficit hyperactivity disorder, psychiatric disorders [(such as adolescent depression)], conduct disorders, criminal behaviors, and school and career failure.” (Slotkin, 2008, p. 1).

Adolescent Exposure

Empirical studies using both humans and animals have demonstrated that adolescents are more vulnerable to developing nicotine dependence than adults (Ginzel et al., 2007; Slotkin, 2008). This is because the brain of an adolescent is still in the process of developing. It has been shown that even a single exposure to nicotine has the potential to create permanent neuronal changes in the adolescent brain, particularly in the areas involved in learning and memory, and these changes increase the risk of addiction even if followed by a long period of nonsmoking (Ginzel et al., 2007). Early exposure also prompts vulnerabilities to later stress and depression. Finally, findings indicate that nicotine has a greater impact on the developing brain the earlier the exposure occurs. The concern is that the widespread availability of NRT may attract curious youth into experimenting with nicotine, at which point they may quickly lose autonomy over their nicotine consumption which may lead to illicit drug use. However, given that most daily smokers begin smoking before the age of 18, the nicotine patch and gum are safer than smoking even for those under 18 years old (OMA, 2008). According to CAN-ADAPTT (2011), while there is little empirical evidence to support the effectiveness of NRT in young smokers, NRT has been shown to be safe (i.e. NRT does not pose additional problems when compared to smoking and remains a far safer alternative to tobacco use).

Treatment Guidelines

As discussed, healthcare practitioners generally advise that behavioural counseling serves as the primary intervention strategy to combat nicotine addiction (CAMH, 2010). However, if counseling proves ineffective, pharmacotherapy is generally viewed as a safer alternative to smoking (CAMH, 2010; OMA, 2008). Within the literature, Bupropion has been cited as the first line of pharmacological defense during pregnancy and adolescence, followed by varenicline with the use of NRT as the final resort (Briggs, 2008).

The literature discourages NRT use in the first trimester of pregnancy, as findings indicate the fetus is most vulnerable to congenital malformations during this time (CAMH, 2010; Ginzel et al., 2007). Pregnant women are also advised to discontinue use after two or three months (Smoking: Chemist & Druggist, 2006). In terms of dosing, the Centre for Addiction and Mental Health (2010; 2011) recommends the lowest effective dose of nicotine, which should be used in combination with continued behavioural interventions and initiated only after behavioural interventions alone have proven ineffective. Patches should be avoided in favor of more intermittent forms of NRT (i.e. gum or lozenge) or removed at night if intermittent forms of NRT are not an option (CAN-ADAPTT, 2011; CAMH 2010; 2011; Slotkin, 2008). Although breast milk contains very little nicotine, breast-feeding women would also benefit from intermittent forms of NRT in order to allow spacing between nicotine exposure and breast-feeding (CAMH, 2010). Nicotine is metabolized more quickly during pregnancy (Coleman et al., 2011), therefore,
healthcare practitioners should anticipate that standard doses may prove ineffective for their pregnant clients and may require adjustment on an individual basis under careful supervision.

As discussed, the recommendation of NRT to adolescents under 16 years old falls under the discretion of the healthcare practitioner. Before recommending NRT to adolescents, the healthcare practitioner should determine: 1) the presence of a nicotine addiction and 2) the desire to quit tobacco use. These precautions are especially important when treating this population due to the risk of NRT abuse (Ginzel et al., 2007). Adolescent use of NRT should not exceed 12 weeks, as to avoid exacerbating dependency in this especially vulnerable population (Smoking, Chemist & Druggist, 2006).

Given the inherent vulnerabilities of these populations, pregnant and adolescent clients undergoing smoking cessation therapy should be carefully monitored.

For more information, the 2008 OMA Position Paper “Rethinking Stop-Smoking Medications: Treatment Myths and Medical Realities” provides an insightful discussion on smoking cessation practice with vulnerable populations with emphasis on dispelling the myths associated with pharmacotherapy use in these populations (including pregnant women and adolescents; Myths 7 and 8 respectively).

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69. Are there resources available for helping people who are transgendered with quitting smoking?

Rainbow Health Ontario (RHO) in partnership with Toronto Public Health, Smokers Helpline, and the Rainbow Services at the Centre for Addiction and Mental Health developed the “Clear the Air” Campaign to address tobacco use in LGBTQ communities.

Please click the following link to proceed to the Clear the Air Campaign Website. Find information on the prevalence of tobacco use in LGBTQ communities, as well as contributing
factors and why quitting is so important. Support services that are LGBTQ-friendly, informed, and specific are also provided.

http://www.clear-the-air.ca/

To learn more about Rainbow Health Ontario, please click the following link to proceed to their website:

http://www.rainbowhealthontario.ca/home.cfm

70. Where can I find smoking cessation/prevention resources specifically for the Indigenous community?

The TEACH Project, a part of the Nicotine Dependence Clinic at the Centre for Addition and Mental Health, is responsible for educating healthcare practitioners about effective tobacco cessation interventions. In response to the disproportionately high rates of tobacco addiction in indigenous communities, TEACH reached out to First Nations healthcare practitioners, community members and stakeholders to form an Engagement Circle that would work collaboratively to develop a smoking cessation toolkit specifically addressing tobacco use within this population and provide culturally appropriate smoking cessation intervention strategies. The toolkit material, titled “IT’S TIME: Indigenous Tools and Strategies on Tobacco Interventions, Medicines, and Education,” may be downloaded, free of charge, from the TEACH website. The toolkit contains a description of the four teaching circles as well as a guide for how to facilitate a teaching circle. Additionally, the toolkit includes several handouts and resources for course participants as well as a comprehensive environmental scan of resources, programs, and tools that cater specifically to the First Nations community.

To download your own copy of “IT’S TIME: Indigenous Tools and Strategies on Tobacco Interventions, Medicines, and Education” please proceed to the TEACH website:

https://www.nicotinedependenceclinic.com/English/teach/Pages/KnowledgeTransfer-Exchange/IT%27S-TIME.aspx

For more online resources that address tobacco use in indigenous communities, please feel free to access the following websites:

The Healthy Aboriginal Network publishes comic books that address various health and social issues affecting youth. “River Run,” aimed to promote smoking prevention among youth, addresses the important distinction between commercial tobacco use and traditional tobacco use in aboriginal communities.

http://www.thehealthyaboriginal.net

Tobacco Wise is an aboriginal tobacco program that offers resources, testimonials, and information about how tobacco use interferes with athletic performance.

http://www.tobaccowise.com/home/
71. **Is there a specific dosing protocol of smoking cessation medications for clients considered to be morbidly obese?**

Dr. Milan Khara, an Addiction Medicine Physician with Vancouver Coastal Health and TEACH faculty member, recommends upward titration of standard dosing schedules in patients considered to be morbidly obese, as standard doses often prove ineffective in these patients (M. Herie, personal communication, April 29, 2011). This off-label approach, while standard practice, has not received much empirical attention or clinical testing. Thus, upward titration should occur incrementally under close supervision. It is important to remember the golden rule of smoking cessation pharmacotherapy, which applies to all clients: *the lowest effective dose is best.*

**Bupropion**

Individuals considered morbidly obese may find bupropion an attractive smoking cessation aid, as the use of bupropion has been associated with dose-related weight loss. The product monograph of bupropion warns that single doses of bupropion should not exceed 150mg in order to mitigate the risk of seizures. However, doses exceeding 150mg/day may be considered on an individual basis if doses are separated by at least 8 hours.

**Varenicline**

The maximum dose of varenicline outlined in the product monograph is 1.0 mg twice/day. However, the product monograph allows for upward titration based on the patient and practitioner’s mutual evaluation of how well the patient is tolerating varenicline as well as how likely higher doses are to increase the client’s likelihood of achieving abstinence.

**Nicotine Replacement Therapy (NRT)**

While standard dosing of NRT is variable due to the tendency to combine more than one form of NRT treatment (i.e. combination therapy), clinical trials have documented the efficacy of NRT doses up to 63 mg/day (Benowitz, Zevin, & Jacob, 1998).

To access these product monographs and more, please proceed to the Health Canada Drug Product Database:


72. **My client is a long-haul truck driver who smokes to avoid weight gain. How can I help him find alternatives and quit smoking?**

Due to the sedentary nature of the truck driving profession, it is very easy for truck drivers to gain weight. Luckily, there are many resources available to help truck drivers make healthier choices within the restraints of their lifestyle and control their weight through dieting and exercise, without smoking. Behavioural smoking cessation counseling and pharmacotherapy (if
necessary), coupled with healthy strategies to avoid weight gain, may prove helpful in addressing nicotine addiction with this population. Of the available pharmacological smoking cessation aids, bupropion may be particularly attractive among truck drivers due to its demonstrated efficacy at attenuating post-cessation weight gain (Ebbert & Fagerstrom, 2012).

**General Weight Control Strategies:**

*Eat Fewer Calories*

Sedentary individuals burn fewer calories than active individuals. Therefore, it is important to tailor your calorie intake based on how many calories you are burning to avoid storing excess calories as fat.

*Pack Healthy Snacks*

Many articles suggest *investing in a mini-fridge and even a microwave.* While not all fruit and vegetables need to be refrigerated (such as apples, oranges, and peppers) these foods are often more enjoyable and refreshing when cold. This is important if, like most truck drivers, eating is a way of staying alert while on the road for extended periods of time. Carrots, celery, and cucumber are excellent snacking foods as they are refreshing, take time to chew, and have very few calories. A microwave is useful for heating soups (broth-based) for a low-calorie meal that is easy to store. Salt-free nuts (such as almonds) can also be a healthy snack option if consumed in moderation, as nuts can be high in fat.

*Dine Out Responsibly*

If you must dine out, choose healthier options and avoid high-fat, high-sodium foods. Opting for whole wheat bread/rice, lean meats (such as grilled chicken or turkey), steamed vegetables, and salads (with low calorie dressing on the side) can greatly reduce the consumption of empty and “hidden” calories.

*Integrate Exercise into your Routine*

Use pit stops to exercise. Consider packing a bag with dumbbells, elastic bands, and wrist/ankle weights that you can use while seated. Rose Erikson, who wrote “Strength Training for Truck Driving,” suggests that even certain truck-related equipment can be used to exercise and substitute many of these items. Use any opportunity to get your heart rate up. Park further away from the food venue and jog instead of walk. Take 10 minutes, 3 times a day, to do jumping jacks or lunges alongside your truck. If you own a laptop, consider investing in fitness videos that you can take with you anywhere.

For more information, please refer to the following articles:

Good Diet Plan for Truck Drivers:

Health Truck Drivers (provides a detailed description of the foods to opt for and avoid, as well as some tips to help speed up your metabolism):

How To Lose Weight For Truck Drivers:
http://www.livestrong.com/article/362708-how-to-lose-weight-for-truck-drivers/

Strength Training for Truck Driving:
http://www.livestrong.com/article/345927-strength-training-for-truck-driving/

CNS drugs, 26(1), 1-10.

73. Are there any studies that compare abrupt versus gradual tobacco cessation in individuals with schizophrenia?

Williams and Foulds (2007) conducted a study to determine the efficacy of various smoking cessation intervention in the schizophrenic population. The authors discuss both the abrupt and gradual cessation models as viable treatment options, depending on the individual client’s characteristics. Since individuals diagnosed with schizophrenia are often heavier smokers with higher levels of nicotine dependence, gradually reducing the number of cigarettes smoked as an intermediary step towards cessation may be preferred in this population.

To access this article and learn more about smoking cessation practice in the context of schizophrenia, please click the following link:


74. Does nicotine from NRT get passed through breast milk?

Nicotine does pass into breastmilk (CAN-ADAPPT, 2011). Generally speaking, when working with pregnant or breast feeding mothers, health practitioners should always opt for nonpharmacological smoking cessation therapies, such as behavioural counseling, before considering the use of NRT or any other smoking cessation medication (CAMH, 2010; CAN-ADAPPT, 2011). However, if counselling proves ineffective, pharmacotherapy is generally viewed as a safer alternative to smoking (CAMH, 2010; OMA, 2008). Although breast milk contains very little nicotine, patches should be avoided in favor of more intermittent forms of NRT (i.e. gum or lozenge) to allow spacing between nicotine exposure and breast-feeding (CAMH, 2010).

CAN-ADAPPT. (January, 2011). Canadian practiced-informed smoking cessation guideline: Summary statements. Toronto, Canada: Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment, Centre for Addiction and Mental Health.
75. Are the nicotine spray and gum advisable for teens who are trying to quit smoking, even if they are pregnant?

Health practitioners generally advise that behavioural counseling serve as the primary intervention strategy to combat nicotine addiction (CAMH, 2010). However, if counseling proves ineffective, pharmacotherapy is generally viewed as a safer alternative to smoking during pregnancy and adolescents (CAMH, 2010; OMA, 2008).

The literature discourages NRT use in the first trimester of pregnancy, as findings indicate the fetus is most vulnerable to congenital malformations during this time (CAMH, 2010; Ginzel et al., 2007). As well, fast-acting NRT products, such as the nicotine spray and gum, are preferred during pregnancy over the patch. However, health practitioners should be cognizant of the greater risk of dependency associated with faster absorbing NRT products, as adolescents are particularly vulnerable to developing nicotine dependence. Due to this vulnerability, health practitioners are also advised to limit the use of NRT with adolescents to a maximum of 12 weeks (Smoking, Chemist & Druggist, 2006).


76. Is bupropion contraindicated in adolescents who wish to stop using tobacco?

The empirical evidence regarding the safety and efficacy of bupropion in the adolescent population is inconclusive. According to the product monograph, bupropion is not indicated for use in adolescents and has been associated with suicidal ideation and behavior, severe agitation-type adverse reactions (including aggression and emotional lability), and seizures in clinical trials with this population. Although the use of bupropion among adolescents currently remains “off-label,” empirical findings are beginning to emerge which demonstrate the potential utility of bupropion to help adolescents safely quit tobacco use. Briggs (2008), for example, actually recommended Bupropion as the first line of treatment for nicotine dependence in adolescence, following nonpharmacological forms of intervention such as counseling.

A study by Upadhyaya, Brady, and Wang in 2004 showed that bupropion SR, in conjunction with brief counseling, may be both safe and effective for adolescents suffering from nicotine addiction, with or without comorbid ADHD (as cited in Meltzer & Meltzer, 2010). A recent randomized, double-blind pilot trial (Gray et al., 2012) found that bupropion XL was efficacious in helping adolescents reduce their smoking from an average of 15.8-4.0 cigarettes per day, with a small number of participants achieving complete abstinence. In addition, the use of
bupropion XL was not associated with any serious adverse events. Another study conducted by Muramoto and colleagues, involving 312 adolescent smokers, found that 300-mg/d of bupropion SR was efficacious in promoting short-term (but not long-term) abstinence, producing higher cessation rates than either placebo or 150-mg/d of bupropion SR (as cited in Colby & Gwaltney, 2007).

According to the literature, adolescent smokers differ from adult smokers in that they tend to smoke more heavily, be more dependent on nicotine, experience lower quit rates, and relapse quickly upon the termination of smoking cessation medication (Colby & Gwaltney, 2007). These observations highlight the importance of intensive behavioural therapy, appropriate dosing, and the potential extension of both pharmacological and behavioural treatment to improve retention of smoking cessation gains. Currently, the U.S. Department of Health and Human Services guidelines recommend clinicians consider bupropion with adolescents only after nicotine dependence has been established and under careful supervision.


77. Is varenicline recommended for use in teens who wish to quit smoking?

Varenicline is the newest of the smoking cessation medications currently available. As a result, it has yet to receive the empirical testing necessary to determine its safety or efficacy in the adolescent population. For this reason, the product monograph for varenicline does not recommend its use with adolescents who are trying to quit tobacco use. A recent randomized, double-blind pilot study (Gray et al., 2012), however, found that adolescent smokers who received varenicline reduced their smoking, on average, from 14.1 to 0.9 cigarettes per day, with some achieving complete abstinence. In addition, no serious adverse events were reported and not a single participant discontinued use due to adverse side effects of the medication. Interestingly, this was not true of participants in the same study who received bupropion, which has received much greater empirical support for use in the adolescent population; two participants using bupropion discontinued the medication due to mild adverse effects. Overall, while the research on varenicline with adolescents is limited, findings from this pilot study demonstrated that varenicline was well-tolerated and was not associated with depressive symptoms or suicidality in this group of adolescent smokers.


78. Have psychiatric populations been included in varenicline studies/trials of just “regular” populations?
With respect to psychiatric populations, a couple of studies have been conducted to evaluate the efficacy of varenicline in populations experiencing distinct mental health concerns. Weiner (2011) completed the first randomized double blind study of varenicline with schizophrenia. This small sample supported the efficacy of varenicline in people with schizophrenia, as observed in the 4 participants randomized to this medication. In addition, similar results were found for schizophrenics in open label studies (Smith et al., 2009) as well as case series (Evins & Goff, 2008). Subjects had primarily experienced expected side effects, including those of increased activation, but psychotic or depressive symptoms did not appear to worsen.

In a distinct population, the safety and effectiveness of varenicline was tested in a veteran population with a high prevalence of mental illness (Purvis et al., 2009). This study looked at cessation rates at 9 and 12 weeks of varenicline therapy. Of the 50 patients included in this study (n=50), 30% successfully quit smoking (n =15). The study results demonstrate a lower success rate and a higher incidence of adverse drug events in this veteran population in comparison to premarking data. Four out of 50 subjects, who had an underlying psychiatric illness, discontinued therapy due to an increase in mood and behavioral changes.

In conclusion, patients with mental illness may consider varenicline a first line or second line of treatment following nicotine replacement therapy. The use of varenicline is considered safe and effective in a broad range of populations and psychiatric diversity. The current evidence does not indicate that adverse neuropsychiatric effects are causally related to use of varenicline, with the exception of sleep disturbances. Persons with mental illness, who are interested in quitting smoking, should be offered varenicline in combination with psychosocial interventions (Tonstad & Els, 2010).


79. Is there any Canadian evidence supporting the fact that usage of NRT in psychiatric populations should not differ from how it is used in “regular” populations?

The evidence that is reported is from the American Journal of Psychiatry. This study (Baker et. al, 2006) investigated smoking cessation and psychotic disorders. The authors discuss that the overall cessation rate achieved with NRT was modest and lower than that reported among smokers without a psychiatric illness. The rates that they reported in their sample are not uncharacteristic due the fact that people with a chronic mental illness often have higher nicotine dependence, smoke more each day, and are less likely to have made previous attempts to stop smoking. Also, this study did not investigate the off-label prescribing of NRT.
Does smoking exacerbate Crohn’s Disease?

The research indicates that smoking increases one’s risk factor for developing Crohn’s disease and aggravates the existing condition (Hilsden et al., 2000). Several studies have confirmed that smoking cessation significantly improves the course of the Crohn’s disease (Hilsden et al., 2000; Wilson, 2010). In fact, some researchers believe that smoking cessation is actually one of the most effective (if underused) interventions available for attenuating the symptoms of Crohn’s disease (Wilson, 2010).

Some studies have indicated that these effects are reversed in those with ulcerative colitis; such that smoking may protect against ulcerative colitis and improve the course of the existing disease (Cosnes, 2004).

Have there been any updates from Health Canada re: Numerous CHAMPIX starts and increased risk of a Myocardial Infarction (MI)?

In a recent meta-analysis, Prochaska and Hilton (2012) examined the existing research to evaluate the risk of cardiovascular adverse events associated with varenicline treatment for nicotine addiction. All published randomized, placebo controlled trials using varenicline for tobacco cessation were included and events occurring during treatment (as well as 30 days post-discontinuation) were examined. Findings were analyzed according to four summary measures and none of these measures suggested that varenicline treatment elevated the risk of adverse cardiovascular events. However, it should also be noted that another meta-analysis conducted by Singh and colleagues in 2011 found that varenicline use dramatically increased tobacco users’ risk of experiencing an adverse cardiovascular event (an increase of 72 percent). Moreover, the current evidence on the association between varenicline and the risk of MI is, at best, inconclusive and health practitioners should exercise caution when prescribing varenicline to these high-risk population and monitor clients carefully for any signs of adverse side-effects.

82. My client is a post-menopausal female with chronic insomnia (potentially exacerbated by nicotine withdrawal symptoms) who chain smokes 4 cigarettes in the early morning for “something to do.” While this treats her nicotine withdrawal, the stimulant effect prevents her from returning to sleep. How can I help her break the cycle?

Insomnia is a common symptom of both nicotine withdrawal as well as menopause (Marcolina, 2008; Soares, 2005). That being said, the most effective intervention will likely address the nicotine addiction, insomnia, and possibly any contributing menopausal hormonal imbalances concurrently (Saddichha, 2010). Although cognitive behavioral therapy (CBT) has been found to be the most effective treatment of insomnia, like quitting smoking it requires fundamental changes to one's lifestyle and the endurance of short-term discomfort in favor of long-term relief, which can threaten/reduce client compliance (Kraus & Rabin, 2012; MacDonald, 2008).

Nicotine Addiction

To target the nicotine addiction, the client might benefit from the continuous nicotine delivery system of an NRT patch, which may reduce nicotine cravings during the night. According to a study by Staner and colleagues (2006), the 24 hour nicotine patch is more effective than the 16 hour patch at alleviating sleep disturbances associated with tobacco withdrawal. The addition of a short-term nicotine delivery system, such as the nicotine gum, lozenge, or inhaler, may also be helpful to address cravings during the day (Ebbert et al., 2010). However, the client should refrain from using these acute NRT products during the night due to their stimulatory effects, which would likely prevent the client from falling asleep.

Insomnia

To target the insomnia, both CBT and pharmacology are cited in the literature as efficacious interventions in the short-term, while only CBT provides long-term efficacy (Kraus & Rabin, 2012; MacDonald, 2008). CBT involves targeting, testing, and adjusting dysfunctional cognitions about sleep (Kraus & Rabin, 2012). According to Siddichha (2010), clients who suffer from insomnia often suffer from unrealistic sleep expectations, misconceptions about the causes of insomnia, amplifications of its consequences, and performance anxiety due to excessive attempts at controlling the sleep process. Due to the propensity of benzodiazepines to lead to dependence, much of the literature has focused on the utility of non-pharmacological interventions, which attempt to resolve the cause of insomnia, addressing problematic sleep behaviors and cognitions in the long-term. (Soares, 2005) Of the non-pharmacological strategies available, stimulus control therapy (i.e. using the bed only for sleeping and sex, allowing only 15-20 minutes to fall asleep before removing oneself from the bedroom);
relaxation (i.e. progressive muscle relaxation, guided imagery, deep breathing, music, hot baths, drinking hot milk); and cognitive therapies (targeting faulty beliefs about sleep) have the highest rates of success among clients suffering from insomnia (Kraus & Rabin, 2012; MacDonald, 2008; Saddichha, 2010; Soares, 2005). However, sleep restriction (i.e. restricts time in bed to the client’s subjective account of how much sleep they usually achieve per night, increasing this time by increments of 15-20 minutes); paradoxical intention (i.e. deliberately attempting to remain awake, targeting fears around insomnia); and sleep hygiene education (i.e. discontinue caffeine, nicotine, or alcohol intake near bedtime, avoid exercise or heavy meals near bedtime, avoid staying in bed if unable to sleep, wake at a consistent time, avoid naps) are also well-cited in the literature for their utility in helping clients achieve healthier sleeping patterns (Kraus & Rabin, 2012; MacDonald, 2008; Saddichha, 2010; Soares, 2005; Uchiyama, 2011).

Menopause

In the context of menopause, estrogen may be useful in treating insomnia and has been shown to minimize the number of awakenings throughout the night and increase rapid eye movement (REM) sleep (Soares, 2005). One study by Marcolina (2008), found that both estrogen and progesterone replacement improved the quality of sleep in postmenopausal women suffering from insomnia. Marcolina (2008), recommends that when treating women for insomnia, it is important to conduct a full endocrinologic evaluation in order to determine ovarian function and inform intervention.

Course of Management

Saddichha (2010), recommends the following course of management to treat insomnia:

1) Evaluate insomnia treatment options according to cost, preference, and availability
2) Optimize treatment for co-morbid disorder (i.e. nicotine dependence)
3) Initiate treatment with cognitive behavior therapy with or without relaxation therapy
4) If no effect, consider another modality of treatment (until successful outcomes are achieved)
5) If still no improvement, re-evaluate especially for occult or co-morbid disorders
6) Reconsider diagnosis
7) Combine with first-line pharmacology agents (zalephon, zopiclone, temazepam, quazepam)
8) Combine with second-line pharmacology agents (benzodiazepines/amitriptyline, antihistaminics)
9) Try alternative therapies (valerian, ramelteon, melatonin)

Useful Links

The following is a list of online resources for clients who wish to learn more about conquering insomnia while quitting smoking:
Quitting Smoking and Insomnia (outlines useful strategies to address insomnia while quitting smoking): [http://smoking ygoy.com/quitting-smoking and insomnia/](http://smoking ygoy.com/quitting-smoking-and-insomnia/)


MacDonald, P. (2008). How to help patients with insomnia: few patients present complaining of difficulty sleeping, but insomnia should be considered in those with issues such as irritability, an inability to concentrate and low mood. *Practice Nurse, 35*(1), 15-20.


83. My client was smoke-free for 80+ days while using Champix but recently relapsed and is now smoking 6-8 cigarettes a day. She has one box of NRT patches left and cannot afford to purchase additional patches but qualifies for free Champix by her Ontario Drug Plan. She has an upcoming dental surgery to remove her remaining teeth. Should I advise her to 1) start Champix immediately in hopes she will have stopped smoking before her dental surgery or 2) time the start of her prescription so that she is still taking Champix during her recovery from her procedure or 3) suggest an alternative smoking cessation technique?

The current literature suggests that patients should abstain from smoking at least four weeks, and preferably eight weeks, prior to surgery to minimize the risk of postoperative complications (Mastracci et al., 2011; Thomsen, Villebro, & Moller, 2010; Wong et al., 2012). The evidence demonstrates that individuals who smoke suffer a significantly greater risk of intra- and postoperative complications. A systematic review of the current literature shows that while smoking impairs wound healing, immune function, and respiratory function, NRT does not appear to negatively affect post-operative outcome (Thomsen, Villebro, & Moller, 2010). Additionally, empirical studies have shown that smoking-induced impairments to immune function and reductions in lung function may be improved or reversed after 6-8 weeks of abstinence. Much of the literature demonstrates the utility of NRT in the preoperative population but few studies have tested the efficacy of other medications for smoking cessation in preoperative patients. However, the key finding suggests that there is a critical period 4-8 weeks prior to surgery during which intensive smoking cessation interventions (such as counseling and pharmacotherapy) can significantly mitigate clients’ risk of complications and lead to short- and even long-term abstinence (Mastracci et al., 2011; Thomsen, Villebro, & Moller, 2010; Wong et al., 2012). Although some smokers report greater difficulty quitting smoking when under the
stress of an upcoming surgery, many smokers found the opportunity to reduce their risk of complications to be a powerful motivator to quit (Thomsen, Villebro, & Moller, 2010).


**84. If my client experiences a lot of coughing when quitting smoking, at what point should I refer them to a physician?**

According to Dr. Hurt (2010) with Mayo Clinic internist and director of the Nicotine Dependence Center:

> Although it’s not common, some people find that they seem to cough more than normal soon after they stop smoking. The cough is usually temporary and may actually be a sign that [the] body is healing. Why some people seem to cough more soon after quitting smoking [is not] clear. One explanation is that as the lungs heal, the microscopic hairs lining them — called cilia — begin working again. As the cilia attempt to clear out the inhaled particles, it can lead to coughing. This coughing may last as long as a couple of months, until the cilia are fully recovered. To relieve coughing in the meantime, try sipping water or sucking on cough drops. If coughing persists for more than eight weeks or if coughing brings up sputum or blood or disturbs your sleep, see your doctor to check for a more serious cause of your coughing.


**85. My patient has tried Zyban, CHAMPIX, and the patch with no success. She has a history of mental illness as well as angina and underwent an angioplasty in 2010. She has smoked 25 cigarettes per day for the past 40 years. She is now hoping to try the patch in combination with the inhaler. Given her cardiovascular disease, what would be the best treatment option for her?**

While empirical findings have not been entirely conclusive, a large body of research has documented that NRT, bupropion, and varenicline are safe and effective in patients with cardiovascular disease (CVD; Joseph & Fu, 2003; Ratchford & Black, 2011; Rigotti et al., 2010; Tonstad et al., 2003).

While NRT is generally considered safe in the context of cardiovascular disease, the cardiovascular effects of nicotine have provoked hesitation among clinicians to prescribe NRT to cardiac patients. According to the literature, nicotine raises blood pressure by 5 to 10 mm Hg for approximately 30 minutes (Joseph & Fu, 2003). However, nicotine has not been shown to cause hypertension and the rate at which it is absorbed is far slower when delivered by nicotine
replacement products than by cigarettes. The nicotine from nicotine replacement products also travels through different channels in the body (through venous rather than arterial circulations), without peak concentrations. Evidence suggests there seems to be a dose-response curve of nicotine and heart rate such that doses of nicotine beyond a certain level will have little additional effect on heart rate. Thus, although combination nicotine replacement therapy has not been extensively studied in patients with CVD, the finding that higher doses of NRT may not differentially impact heart rate may be comforting to clinicians treating heavily addicted cardiac patients.

Controlled trials examining the safety and efficacy of varenicline and bupropion for smoking cessation in patients with CVD have demonstrated comparable results to those seen in the general population (Joseph & Fu, 2003; Ratchford & Black, 2011; Rigotti et al., 2010; Tonstad et al., 2003). Both medications are associated with significantly higher abstinence rates compared to placebo and neither has been shown to produce cardiovascular effects (Rigotti et al., 2010). Varenicline in particular enjoys abstinence rates 3 times greater than placebo (Ratchford & Black, 2011; Rigotti et al., 2010). While varenicline is unlikely to interact with other medications, which is particularly beneficial to patients with CVD who may be receiving multiple medications, some researchers warn against the use of varenicline in combination with NRT (Ratchford & Black, 2011).


**SMOKE-FREE ENVIRONMENTS**

86. Should smoke-free hospitals require patients to sign a waiver to leave the property to smoke? If so, does it refer to the legal and medical implications of doing so and/or the prohibition of taking hospital property (i.e. medical equipment) with them?

**Legal Obligations**

While hospitals are not legally required to ask patients to sign a waiver before leaving hospital property to smoke, many hospitals do so in order to mitigate risks of litigation. As part of the Smoke-Free Ontario Act, smoking is prohibited within a nine metre radius of any entrance of exit of a hospital or psychiatric facility. Under this act, hospitals may choose to accommodate patients or employees who smoke by providing a designated smoking area outside, but many
are opting to implement Smoke-Free policies that prohibit smoking on hospital grounds entirely as a health promotion strategy.

**Examples of Inpatient Smoking Cessation Services**

- *Nicotine Replacement Therapy (NRT)* provided free for patients admitted to hospital or residential care for the duration of their stay.
- For residents in Special Care Homes, some hospitals will provide *one-time access to NRT* at no cost for a specified duration, for example 10-weeks.
- *Brief tobacco cessation counseling* and policy communication integrated into nursing practice in acute and special care facilities
- *Access to Addiction Counselor* for support, education, and one-on-one/group counseling for employees, patients and even patients' families in some cases.

**Waiver to Leave Hospital Property to Smoke**

Smoke-free hospitals generally urge patients to remain on hospital property while receiving care and to take advantage of the tobacco cessation services provided, such as NRT and counseling. However, if patients decline these services and wish to continue smoking during their stay, these patients are often required to sign a waiver before leaving hospital property to smoke. Waivers serve to protect the hospital from responsibility should the patient sustain an injury or suffer a deterioration of their medical condition while outside hospital premises, ill-advised, to smoke. The exact contents of this waiver are likely to vary according to the hospital and the smoke-free policy adopted. However, a comprehensive waiver should warn patients that hospital staff will not be able to accompany patients to smoke and that medical equipment belonging to the hospital may not leave the hospital grounds. Thus, upon signing the waiver, patients are considered to have refused treatment and assume complete accountability for their own safety and health status while unsupervised outside hospital grounds. In addition, the hospital cannot be held liable for any potential consequences resulting from the patient’s decision to refuse treatment.

For more information on how the Smoke-Free Ontario Act applies to hospitals, please follow this link:


Please click the following link to view a SAMPLE WAIVER, generously provided by the Saskatoon Health Region:

To learn more about the smoke-free policies initiated at other hospitals, including CAMH, please visit their websites at:

**CAMH:**

https://www.nicotinedependenceclinic.com/English/teach/resources/Policy%20Resources/CAMH%20Smoke%20Free%20Policy.pdf

http://www.southlakeregional.org/aboutus.smokefree.html
87. What approaches are available to promote tobacco-free living at workplaces? What types of incentives or supports might be offered as part of this promotion?

The Health Canada website provides a comprehensive guide on how to develop tobacco control policies within the workplace entitled, “Towards a Healthier Workplace: A Guidebook on Tobacco Control Policies.” This helpful guide discusses how developing tobacco control policies can contribute to better health, business, and employee satisfaction as well as compliment smoke-free legislation and avoid litigation by non-smoking employees put at risk by second-hand smoke. The guide also addresses the different policy options available to organizers and provides samples of these policies. The guide also provides various tools that organizers can utilize to implement tobacco control policies and informative handouts to promote these policies to employees. Additional information regarding the stages of implementation, evaluation, and case examples are provided.

To access “Towards a Healthier Workplace: A Guidebook on Tobacco Control Policies” and learn more about implementing smoke-free policies within the workplace, please proceed to the Health Canada website and download the guide:


88. What precautions might a smoke-free facility put in place to prevent third-hand smoke (smell of smoke the smoker brings into the building on their body) where smoking and non-smoking employees must share a workspace that is respectful to both parties?

Make Smoking Cessation Services Available to All Employees

Providing support for employees who want to quit smoking is a vital component of any responsible and comprehensive tobacco control policy. Helping employees achieve abstinence from cigarettes improves absenteeism, productivity, and reduces costs associated with health and life insurance. It also promotes a corporate philosophy that is committed to the health and well-being of all employees, improving health outcomes of both the smoking employees and nonsmoking employees put at risk by second- and third-hand cigarette smoke.

A useful guide published by Health Canada entitled “Smoking Cessation in the Workplace: A Guide to Helping Your Employees Quit Smoking” outlines several smoking cessation supports that corporations may offer employees. The smoking cessation options discussed include: self-help; brief, professional advice; individual and/or group counseling; smoking cessation medication coverage; and incentives, contests, and special events to promote smoking cessation. In some organizations, management has purchased air purifiers to rid the office of
cigarette odor. However, the microscopic size of smoke particles has provoked some controversy as to the efficacy of these products.

For more information on implementing smoking cessation support in the workplace, please access “Smoking Cessation in the Workplace: A Guide to Helping Your Employees Quit Smoking” by visiting the Heath Canada website:


Scent-Free Policies and Cigarette Smoke Odor

It has recently been discovered that fragrances, such as perfumes and scented products, while pleasing to some, release harmful chemicals into the air and represent one of the most common pollutants of indoor air. Due to the growing recognition that these products can act as irritants and trigger reactions in scent-sensitive individuals, organizations are increasingly adopting scent-free policies. These policies request that employees and visitors refrain from using fragrances and scented products to protect those with scent sensitivities from discomfort or from suffering an adverse reaction.

Emerging within the literature on smoking is the concept of third-hand smoke. While organizations have responded to widespread acknowledgement about the risks of second-hand smoke by implementing smoke-free policies and disallowing smoking on facility property, there is no existing legislation that protects individuals from third-hand smoke. Third-hand smoke refers to the toxic chemicals contained in cigarette smoke, such as lead and arsenic, which cling to skin, hair, clothing, carpeting, furniture and other surfaces. The problem with third-hand smoke is that, unlike second-hand smoke, it can be carried into a smoke-free environment on the body and clothes of someone who smoked a cigarette prior to entering the facility. This makes third-hand smoke very difficult to control and, thus, breeds controversy between smokers, who are abiding by existing legislation, and nonsmokers, who may suffer discomfort and/or adverse reactions as a result of third-hand smoke.

According to preliminary data, the irritant effects of third hand smoke are roughly the same as those of second hand smoke. The scientific community emphasizes the fact that cigarette smoke is cigarette smoke, whether it is second or third hand. It contains the same toxic chemicals and has the same propensity to trigger allergic reactions and irritate the eyes and lungs. However, the research on third hand smoke is still in its infancy and there is not enough empirical data to determine the exact risks of third-hand smoke exposure. However, no amount of cigarette smoke exposure is safe. Thus, third-hand smoke carries inherent risks that we cannot overlook. It is possible that as cigarette smoke becomes increasingly recognized as an irritant and cause of allergic reactions in sensitive individuals, we may begin to see a new legislative trend emerge wherein organizations begin to include cigarette smoke odor as part of their existing scent-free policy.

For more information on third-hand smoke, please refer to the following links:

http://www.lung.ca/protect-protegez/tobacco-tabagisme/second-secondaire/thirdhand-tertiaire_e.php
Strategies to Avoid Smelling Like Smoke

*Please note that CAMH does not endorse any of these strategies and these strategies are not based on empirical findings*

If an employee does choose to continue smoking, these are strategies that can be implemented in order to reduce the cigarette smoke odor:

1. Use NRT, such as the nicotine patch, while at work. These products will ease nicotine withdrawal symptoms and lessen cravings to smoke while at work. Remember, the only way to avoid smelling like smoke while at work is to avoid smoking during work hours.
2. If you must smoke during work hours, go for a walk to smoke. The air circulation from your movement will decrease the amount of smoke that settles on your clothes. Standing still forces you to immerse yourself in the smoke you have exhaled, which then builds up on your clothes.
3. Use clothing to cover up your body and hair while you smoke (i.e. a coat, headscarf, smock, shawl, or wrap) and place these items in a designated area, away from other employees.
4. Smoke only at lunch, if possible, at the very beginning of your lunch break. One online article claims that the smell of smoke stays on the body for 45 minutes (and an additional 15 minutes for every cigarette smoked after that). Regardless, the greater gap you allow between when you smoke and when you enter the building, the less likely you are to bring the smell of smoke into the workplace with you.
5. While still outside, try to air out your hair. Smoke smell lingers in your hair. For long hair, try shaking it out or flipping it over several times. Dry shampoo may also help reduce cigarette odors in your hair without having to wash it.
6. Bring toiletries to work. Brushing your teeth and using mouthwash after smoking will greatly reduce the smell of smoke on your breath. Smoke residue also stains your teeth so this practice is beneficial to your overall dental hygiene, as well as your fellow colleagues.
7. If brushing your teeth is not possible, use a breath mind or gum immediately after smoking.
8. Wash your hands and face (including your nostrils) with soap after smoking to remove the smell of smoke from these areas. The smell of smoke is strongest on your hands and face. As well, washing your hands with soap will decrease the likelihood you will deposit toxic smoke chemicals onto the surfaces you touch.
9. Consider having a box or two of baking soda lying around, as baking soda absorbs odors.
10. Bring an extra pair of clean clothes to work. This might seem extreme, but much of the smoke odor you carry has been absorbed into your clothes. Short of washing your
clothes at work, changing your clothes if they smell like smoke (to a nonsmoker) may be the only way to avoid smelling like smoke.

11. Spray your clothes (and possibly your office area) with an odor neutralizing room spray. Be mindful, however, that the smell of these sprays can be equally offensive to other employees, so the use of these products should be discussed with your colleagues before attempting this strategy. It has also been suggested that these products may be carcinogenic. Try to find natural sprays. These do not contain the same harmful chemicals found in commercial sprays and are likely to smell less offensive too.

12. If possible, go home after smoking to shower (making sure to wash your hair) and change your clothes. This is the best way to eliminate the smell of smoke from your body following a cigarette.

ITEMS TO KEEP HANDY

- NRT Product, such as the nicotine patch
- Toothbrush and Toothpaste
- Breath mints/strips, gum
- Dry shampoo
- Soap
- Baking Soda
- Extra pair of clean clothes
- Odor neutralizing room spray

For these and other strategies, please proceed to the following links:


89. What are the costs and benefits associated with designating a multi-unit apartment building smoke-free?

Despite the fact that 85% of Canadians are nonsmokers, 75% of Canadians do not allow smoking in their home, and the majority of non-smokers would prefer to live in a smoke-free building, very few landlords have responded to this increasing demand to transition their property to a smoke-free environment. Some landlords and housing providers have the preconceived notion that smoke-free policies are illegal, discriminatory and/or unenforceable. Enforcing non-smoking policies in multi-unit apartments does not prohibit smokers from renting accommodation. It simply prohibits smoking on the building premises, which protects other residents and visitors from the health risks of second-hand smoke exposure. These policies also benefit landlords by reducing the risk of litigation by at-risk non-smokers and the monetary costs associated with smoking, such as the costs associated with fire damage, cleaning, and maintenance.

For more information, please visit the Smoke-Free Housing Ontario website. The site provides useful resources for landlords interested in making their properties smoke-free, including a how-
to guide for adopting a no-smoking policy, interesting statistics, relevant legislation, and tools
designed to ease the transition. The site also provides helpful information for tenants and
sections specific to condominiums, housing co-ops, and public health intermediaries.

http://www.smokefreehousingon.ca/sfho/landlords.html

The National Asthma Patient Alliance (NAPA) recently posted an article entitled “Smoke-free
buildings safe landlords $$ in cleaning costs.” To read this article, please proceed to the NAPA
website:


TOBACCO DEPENDENCE TREATMENT FOR STAFF

90. I want to initiate smoking cessation programming in my workplace for employees.
How should I go about this? What are some key considerations I should take into
account?

Health Canada offers a comprehensive and informative guide detailing how to implement
smoking cessation programming in the workplace. This guide, entitled “Smoking Cessation in
the Workplace: A Guide to Helping Your Employees Quit Smoking,” provides useful information,
suggestions, and resources for employers hoping to develop a workplace smoking cessation
initiative. Some of the topics covered include: how to implement a smoking cessation program in
the workplace; how to assess employee needs and project program costs; and what resources,
tools for employers, and handouts for employees are currently available to support a smoking
cessation initiative in the workplace.

To access this guide, please proceed to the Health Canada website:


Another useful resource published by Health Canada is the “Smoking Cessation in the
Workplace” toolkit. The guide details how to develop appropriate goals and objectives, an
inventory of available resources, a proper needs assessment, activities and supports, as well as
how to engage stakeholders, communicate, and evaluate a smoking cessation program. In
addition, the toolkit offers a plethora of resources to support employers in promoting smoking
cessation in the workplace.

To access the PDF version of this toolkit, provided by the Heart and Stroke website, please click
on the following link:

Health Canada also recently funded a smoking cessation pilot project, called the W.E Can Quit Project, which aimed to develop a smoking cessation model that was both comprehensive and easily adaptable to a wide range of workplace environments. The results of the project were encouraging and the W.E. Can Quit team is said to be releasing a user-friendly toolkit in July 2012, available online at wecanquit.ca, which will outline the steps toward implementing a smoking cessation initiative.

For more information on the W.E. Can Quit Project, please read the following article by Neil MacKenzie, a manager of chronic disease and workplace wellness at the Windsor-Essex County Health Unit, the health unit responsible for leading the project:

http://www.benefitscanada.com/benefits/health-wellness/helping-employees-to-butt-out-27574

91. Should my organization cover the cost of smoking cessation aids for staff? What procedure must be put in place?

Financial incentives, such as offering coverage for smoking cessation medications and services, are considered one of the most effective strategies to promote smoking cessation in the workplace. Health Canada has released two guides to help employers develop smoking cessation initiatives in the workplace, which include information about implementing coverage for pharmacotherapy. These two guides are entitled “Smoking Cessation in the Workplace: A Guide to Helping Your Employees Quit Smoking” and “Smoking Cessation in the Workplace: A Guide to Helping Your Employees Stop Smoking.”

For full access to these guides, please click the following links:

Smoking Cessation in the Workplace: A Guide to Helping Your Employees Quit Smoking:

Smoking Cessation in the Workplace: A Guide to Helping Your Employees Stop Smoking:
http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CFMQFjAC&url=http%3A%2F%2Fwww.heartandstroke.nb.ca%2Fatf%2Fcf%2F%257Be9d7fd18-5e5f-4b5f-b6cf-4142e95dc0c8%257D%2FSMOKING%2520CESSATION%2520IN%2520THE%2520WORKPLACE%2520TOOLKIT.PDF&ei=FoEZUImiIY--9QTokYGYBg&usg=AFQjCNHTF50JJOQDnyuU3mGPonkIf3meSg
THE STOP PROGRAM

92. Will STOP be doing a gradual-to-quit study?

According to Laure Zawertailo, Clinical Scientist for the Addictions Program at CAMH, there are currently no plans to do this on a formal basis (personal communication, August 3, 2012). However, in our STOP with FHTs and CHCs programs healthcare providers do have the discretion to use this approach. As such, we have the ability to compare cessation rates among participants that quit abruptly versus reducing and then quitting.

93. If the research suggests that at least 8 weeks of NRT treatment is optimal, why does STOP on the road only offer 5 weeks of NRT?

According to STOP Coordinator, Justine Mascarenhas, STOP on the Road originally offered a 10 week NRT program (personal communication, July 18, 2012). However, the majority of participants revealed at the follow-up that they used less than half the amount of NRT provided. Therefore, from a public health perspective, STOP opted to provide a 5 week program, in order to reduce the amount of waste and enable STOP to provide treatment to more participants.

94. Will STOP cover the use of gum in combination with the patch?

STOP is only able to cover the cost of NRT gum in combination with the patch in the STOP with Family Health Teams and STOP with Community Health Centre programs (J. Mascarenhas, personal communication, July 18, 2012). All practitioners implementing these programs must abide by the guidelines provided in their organization’s medical directives (J. Fitzpatrick, personal communication, July 18, 2012). For example, CAMH does not prohibit the use of combination therapy (i.e. the patch and the gum) for patients but please refer to your organization’s medical directive to determine whether your team allows for combination therapy. In addition, attention should be paid to the model of intervention being implemented (L. Riad-Allen, personal communication, July 18, 2012). For example, practitioners implementing the individualized model may be able to offer combination therapy (as dictated by the organization’s medical directive) while those facilitating workshops are limited to monotherapy.

95. Nunavut is struggling with access to NRT in our isolated communities where there are no pharmacies and most people require NIHB coverage, which requires a prescription. How can we make NRT more accessible in these communities?

Accessibility to smoking cessation treatment is a major problem in many isolated communities across Canada. However, there are many ways in which communities can collaborate to develop creative and innovative ideas to increase access to NRT and other smoking cessation treatment to compete with the generally wide-spread availability of cigarettes in these regions.
When the STOP Study was first developed, the program attempted to reach out to Family Health Teams in order to increase the accessibility of NRT in communities that STOP could not reach itself (P. Selby, personal communication, August 8, 2012). However, Family Health Teams were still in their infancy and there were simply not enough of them to meet the large demand for NRT. Local advocacy became, and remains today, the most effective strategy to increase access to smoking cessation treatment in isolated communities.

In these isolated communities, local advocacy leaders argued that manufacturers should have smoking cessation products available at every retail outlet where cigarettes are sold. Although NRT products may appear more expensive than cigarettes in the short-term, they are substantially cheaper in the long-term and having these products available alongside cigarettes allows the smoker to exercise choice. As a result of local advocacy efforts, suppliers who were transporting cigarettes to these communities were forced to transport NRT as well. Since NRT products do not require a prescription, it was feasible to argue that NRT products be sold outside of a pharmacy setting in remote locations with little access to this type of venue.

STOP responded to the need for smoking cessation treatment in isolated communities using a different strategy. STOP initiated a call-in centre, which provided counselling over the phone to members of these remote communities and also mailed NRT to those who requested it. Canada Post was able to deliver to almost every address in Ontario with a two percent error rate (Zawertailo et al., 2012). STOP found, in comparing different methods to address accessibility issues in these communities, that this strategy was highly cost effective and much more economical than other methods available. An important factor to consider when addressing accessibility issues in these communities may be whether residents have access to phones or other mediums of communication with outside communities.


96. Are there any new initiatives to receive cessation meds through STOP Study (i.e. pharmacy, Public Health etc.)?

Dr. Peter Selby, Head of the Nicotine Dependence Clinic at CAMH, announced the exciting new development being initiated this fall in which 30 percent of community addiction agencies will be participating in STOP (personal communication, August 8, 2012). He explained this participation will occur in a specialized way similar to how Community Health Centres and Family Heath Teams have participated in recent past.

STOP will be continuing to work with other projects, partnering with pharmacists as well as with public health. As well, STOP-On-The-Road will continue to serve as a gap measure to provide smoking cessation services to regions of Ontario, which may otherwise not be reached. Although Dr. Selby, states that while STOP hopes to expand further in the following years, this goal is a year-by-year process of activity and planning.
97. Where can I find a listing of active tobacco cessation service providers in my area?

The TEACH website offers listings of Tobacco Cessation Practice Leaders according to Ontario Tobacco Control Area Network (TCAN) Regions. Please click the following link to proceed to the TEACH website and find a tobacco cessation service provider near you!

https://www.nicotinedependenceclinic.com/English/teach/Pages/KnowledgeTransfer-Exchange/Practice-Leaders.aspx

98. Are there any inpatient tobacco cessation treatment programs in Ontario?

Inpatient tobacco cessation treatment programs in Ontario are currently offered by Westover Treatment Centre and Enahtig Healing Lodge. To learn more, please visit their websites:

Westover Treatment Centre: http://www.westover-fdn.org/
Enahtig Healing Lodge: http://www.enahtig.ca/enahtig.htm

99. Is there funding available for tobacco cessation medication?

Patients on the Ontario Drug Benefit plan are eligible to receive up to 10 weeks of bupropion or varenicline per year. For more information, please visit the Government of Ontario website at:


100. Is there funding available for agencies or organizations (for example, a residential treatment facility) to provide tobacco cessation medications for clients without a doctor on staff?

STOP, part of the Nicotine Dependence Clinic at CAMH, offers smoking cessation services and has several health practitioners on site who have the authority to dispense tobacco cessation medications to clients who wish to quit smoking. The Nicotine Dependence Clinic is located at 175 College Street (College and University) and CAMH Bell Gateway Building, Addictions Program, 3rd Floor, 100 Stokes Street, Toronto, Ontario M6J 1H4 (Queen and Ossington).

Also, there is currently an initiative by the Ontario Lung Association (OLA) requesting the government to respond to the high rates of lung disease in Ontario by developing an Ontario Lung Health Action Plan. For more information and to learn how to become involved, please visit the OLA website at: http://www.on.lung.ca/page.aspx?pid=1023
101. Is nicotine a “gateway drug”?

Although most people who smoke will not develop other substance use problems, smoking is often the first drug used by people who go on to develop alcohol or other drug problems. In a review of adolescent mental health and addiction problems by Upadhyaya and colleagues (2002) it was found that early onset of smoking – before the age of 13 – predicted later mental health and substance use disorders. In a prospective longitudinal study of 684 adolescents (Lewinsohn et al., 1999), lifetime history of smoking, especially in those who smoked daily, significantly increased the likelihood of future alcohol, cannabis, and other illicit drug and polysubstance use in young adulthood. Quitting smoking for 12 months was associated with a lower risk of future alcohol use disorders.

In susceptible individuals, it appears that smoking may potentially be a gateway drug. Empirical studies (Myers & MacPherson, 2004; Upadhyaya et al., 2003) have shown that more than 80 percent of youth with substance use disorders smoke cigarettes, most use tobacco daily, and many become highly dependent, long-term smokers. Efforts to discourage youth from smoking or to help them to quit could also help to prevent other addictions.

A recent study on mice (Levine et al., 2011) showed that there may be a biological mechanism by which nicotine exposure renders users vulnerable to illicit drug use, thereby acting as a gateway drug. This study was the first to show that nicotine may cause changes in the genetic composition of certain molecules and prime the brain to enhance the behavioural effects of cocaine. Further findings are cited showing that those who used cocaine exhibited higher rates of dependency if they smoked cigarettes prior to using cocaine, as opposed to those who smoked after initiating cocaine use.


102. When is World No Tobacco Day?

World No Tobacco Day is celebrated annually on May 31st and is recognized all around the world. It was first created by the World Health Organization (WHO) in 1987. The day is intended to signify (or at least encourage) a day of 24-hour abstinence from all forms of tobacco use. Additionally, it serves as an opportunity to raise global awareness to the tobacco epidemic and the devastating health effects associated with tobacco use.

For more information, please visit: [www.who.int/tobacco](http://www.who.int/tobacco)
The Lung Association hosts a World No Tobacco Day Face Aging Event, which allows you to upload your photo and uses simulation technology to show you what you would look like if you smoked. Please click the following link to access the event as well as additional facts about smoking: http://www.lung.ca/protect-protegez/tobacco-tabagisme/facts-faits/wntd-inst_e.php

103. **How can I motivate my clients to quit “the last few” cigarettes (3-4) from their daily intake?**

There are many approaches a healthcare practitioner might employ to address a client’s struggle to quit his or her final cigarettes. Some recommend using motivational interviewing techniques to address the security of these final cigarettes and the feelings of loss many clients associate with quitting. Others suggest that it may be helpful to view cigarettes as a close friend of the client’s, one that the client will lose in committing to complete abstinence from tobacco use. She further proposes trying to discover, with the client, new healthy habits that may serve to substitute smoking and mitigate these feelings of loss. In addition, she recommends using the 2mg nicotine gum to reduce cravings for these final cigarettes.

Another study (Burkett, 2006) documented the utility of the NRT inhaler in clients who have reduced their tobacco use drastically and have almost reached cessation but cannot achieve absolute cessation without assistance. The nicotine inhaler, in contrast to other smoking cessation medications, is self-titratable and allows clients the most control over their smoking cessation therapy. It also satisfies (to a degree) the behavioural aspects of nicotine addiction in addition to the pharmacological aspects, which may better address the full allurement of these final cigarettes.

According to Dr. Selby of CAMH’s Nicotine Dependence Clinic, **Assess** client motivation and explore what is leading the client to smoke these last few cigarettes. For example, the client could be receiving inadequate dosing of NRT or habitual reactions to key triggers, such as people, places or things. Once you elicit the reasons as to why the client is having issues quitting their last few cigarettes, **Assist** the client in his or her quit attempt by offering breakthrough NRT or increasing the dose or positioning of a patch.