

# Smoking Cessation Pharmacotherapy

*Quitting smoking is easy; I've done it a thousand times.*  
Mark Twain



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## RxFiles Top 3 Reasons to Stop Smoking?

- Live longer and enjoy the grandkids!**
  - On average, smokers die 10 years younger than non-smokers (↓ cancer, heart & lung disease)
  - Former smokers reduce their risk of heart disease by 50% within 1 year.<sup>1</sup>  
(↓ blood pressure, heart rate & normalize O<sub>2</sub> within 20 minutes)
- Save some major cash!**
  - Over the course of just 5 years, smoking 1 pack per day costs \$18,000
- Because it can be done!**
  - Success is seldom seen on the first attempt.
  - Most smokers will require 4-5 attempts before smoking cessation is successful!<sup>2</sup> Non-pharmacological and pharmacological interventions increase the chance of success.

## What smoking cessation therapies work?

- Personal motivation is key to successful cessation! A major life changing event can be a powerful motivator.
- Support, counseling and follow-up are most useful and should be offered with or without drug options.
- The figure below shows both success rates and the costs of available pharmacological therapies. Options such as nicotine replacement therapies (NRT), bupropion ZYBAN and nortriptyline may be indicated (See chart, page 2).

## To what extent is weight gain a problem?

♦ A gain of <5kg 1st yr is common; while a concern, the benefits of quitting far exceed this issue. Strategies to minimize weight gain should be part of the quit plan.

## Is it OK to smoke while on an NRT Patch?

♦ Smoking the odd cigarette while on the patch is not likely to cause serious harm; however caution is advised in patients with serious arrhythmias, angina or post-MI {Complete cessation while on NRT is most advantageous! Adding an acute release form of NRT such as gum to patch users could benefit those who continue to light up.<sup>3,4</sup>}

## Can bupropion be used in an SSRI patient?

♦ Yes, in some cases if the patient is at low risk of seizures and the dosage is titrated up gradually. See also RxFiles Q&A – Bupropion (Zyban) and SSRIs.<sup>5</sup>

## Table 1: Tips to Help Smokers Succeed

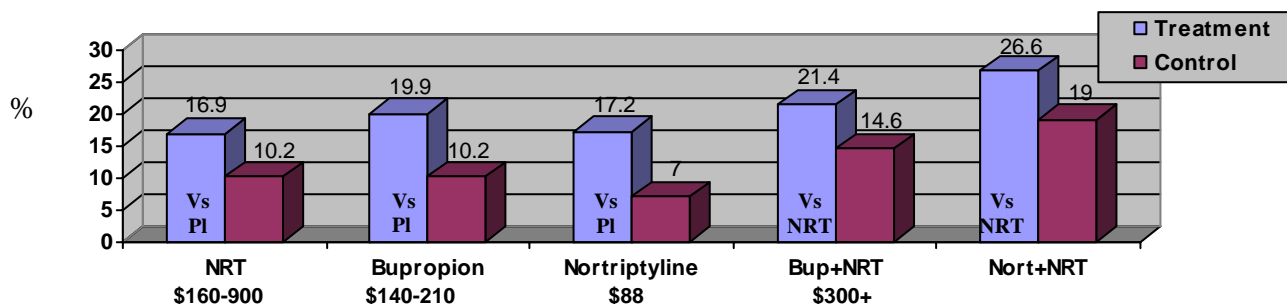
- Set a quit date and follow-up with physician or pharmacist
- Initiate an exercise program before quitting.
- Plan reward events for quitting {SMALL & FREQUENT}
- Join a support group; talk with family and friends
- Find an alternative item to put in your hand
- Avoid places that trigger a craving to smoke
- Request / arrange for telephone follow-up\* (e.g. by Office RN)

\*Smoking cessation : **HOTLINE:** 1-877-513-5333 (NS, SK, ON, MB, NB)  
**WEBSITE:** [www.smokershelplineworks.ca](http://www.smokershelplineworks.ca)

**Other benefits:** less sexual dysfunction, improved cognitive function...

**Various tools** are available to assess dependence. E.g. Fagerstrom Tolerance Scale<sup>6</sup>  
References and acknowledgments available at [www.RxFiles.ca](http://www.RxFiles.ca)

## Effectiveness of Smoking Cessation Pharmacotherapy from Systematic Reviews



	NRT \$160-900	Bupropion \$140-210	Nortriptyline \$88	Bup+NRT \$300+	Nort+NRT	<b>Drugs may double chance of success!</b>
# Trials (6-12mo)	46 <sup>7</sup>	19 <sup>8</sup>	4 <sup>8</sup>	2 <sup>8</sup>	3 <sup>8</sup>	
n (treated + control)	20,767 + 18,736	3794 + 2649	348 + 355	364 + 364	158 + 160	
# successful	3503 + 1916	757 + 270	60 + 25	78 + 53	42 + 31	
Odd Ratio OR; (CI <sup>95%</sup> )	<b>1.77</b> (1.66-1.88)	<b>2.06</b> (1.77-2.40)	<b>2.79</b> (1.70-4.59)	<b>1.60</b> (1.09-2.34)	<b>1.53 (NS)</b> (0.9-2.61)	
Comments	No statistical difference between formulations	↑ Benefit with group behaviour support	Anticholinergic effects	Active control; Bup+NRT vs NRT only	↑ Benefit with: multiple visits, high-CV risk patients	

NNTs average around 10 for single therapies and 13+ for combination versus single therapies. There can be wide variance in the absolute cessation rates depending on population studied and other study interventions (e.g. group behaviour therapy, telephone support, specialized clinics<sup>9</sup>, etc.).  
**Real world observational study - bupropion:** found similar abstinence rates at 1 year (21%); adverse event discontinuation rates were higher (30%).<sup>10</sup>

\$ = cost for course of treatment (usually 12-13 weeks) CI= confidence interval NS=not statistically significant {Supportive interventions generally included in most trials.}

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## References – Smoking Cessation Pharmacotherapy [www.RxFiles.ca](http://www.RxFiles.ca)

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