



Appendix A: Tobacco Use Disorder Medication Table

Dosage Form <i>Trade names</i> Dosage strengths and pack sizes	Usual Adult Dose ^A	Approx. Cost per Month ^B	PharmaCare Coverage ^C	Adverse Effects ^D	Therapeutic Considerations
NICOTINE REPLACEMENT THERAPIES					
Short acting					
Gum <i>Nicorette, Thrive, G</i> 2mg, 4mg 24, 30, 36, 96, 105, 210 pieces Nicorette flavours: mint*, cinnamon, fruit Thrive flavours: mint, fruit	~ 1piece/hr PRN Max: 20 pieces/d Individual taper	\$90- \$180 based on average of 10-16 pieces/d	Over the counter Non benefit Smoking Cessation Program: full coverage for 12 consecutive wks per year of select products*	Cough, throat irritation (usually mild), hiccups, nausea/ dyspepsia (from swallowed nicotine), jaw pain (if incorrect technique).	Bite and Park Strategy: bite gum 1-2 times, then park it between the cheek and the gum x1min; then repeat alternating sides. Use until peppery taste is gone. Use 4mg if history of smoking within 30 mins of waking. Coffee & acidic beverages (e.g., juice, soda) impair absorption; space by ≥15 mins.
Lozenge <i>Nicorette, Thrive, G</i> 1mg, 2mg, 4mg 20, 36, 80, 108, 160 lozenges Nicorette flavours: mint*, fruit Thrive flavours: mint	1 loz. q1-2 hr x6 wks, q2-4hr x3wk, q4-8hr x3wk Max:15 lozenges/d Individual taper	\$80-\$180 based on average of 8-15 lozenges/d	Over the counter Non benefit Smoking Cessation Program: full coverage for 12 consecutive wks per year of select products*	Mouth irritation, soreness in gums, teeth, & throat, nausea/ dyspepsia (from swallowed nicotine).	Move lozenge occasionally from one side of mouth to the other until dissolved (about 20-30 mins). Do not bite, swallow or chew. Can be used in those with temporomandibular disorders, poor dentition, or dentures. Avoid if phenylketonuria; lozenge contains phenylalanine. Coffee & acidic beverages (e.g., juice, soda) impair absorption; space by ≥15 mins.
Inhaler <i>Nicorette</i> 4mg 42 cartridges	6-16 cartridges/d x12wk Max: 16cartridges/d Individual taper.	\$175-\$350 based on average of 6-12 cartridges/d	Over the counter. Non benefit	Throat irritation, cough, rhinitis, dyspepsia.	Inhale deeply into back of the throat or puff in short breaths. Max absorption with short, continuous, frequent puffing. 1 cartridge delivers 4mg of nicotine (2mg is absorbed), replaces 1-2 cigarettes and lasts up to 20 minutes of continuous frequent puffing. Once punctured, inhaler cartridge viable for 24 hs. Helpful for hand to mouth habit associated with smoking.

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Quick Mist <i>Nicorette</i> 1mg 150 sprays Flavours: Fresh mint, cool berry	1-2 sprays q 30 mins x 6 wks; reduce # of sprays per day by half x3wks; 2-4 sprays/d x3wks. Max doses: 2 sprays at a time; 4 sprays/hr 64 sprays/d	\$150-\$220 based on average of 20- 26 sprays/d	Over the counter. Non benefit	Hiccups, throat irritation, nausea.	Spray into mouth, avoiding lips. Wait a few seconds before swallowing. Do not inhale spray. Contains small amounts of ethanol, less than 10 mg per spray. Quick delivery convenient for severe cravings (note: still slower absorption than cigarette due to buccal mucosa absorption).
Long acting					
Patches <i>Nicoderm*</i> , <i>Habitrol, G</i> 7, 14, 21mg/d 7, 14 patches	If ≥ 10 cigarettes/ day: 21mg/d x 6 wks, then 14mg/d x 2 wks, then 7mg/d x 2 wks If < 10 cigarettes/ day: 14mg/d x 6 wks, then 7mg/d x 2 wks Individual taper.	\$100- \$160	Over the counter. Non benefit. Smoking Cessation Program: full coverage for 12 consecutive wks per year of select products*	Local irritation to adhesive may occur. Alternate patch site, apply topical corticosteroid cream, or switch to another agent. Insomnia. If this occurs, can take off at bedtime and apply another patch in the morning.	Apply new patch to clean, dry, non- hairy area every day in the morning. Rotate sites. Do not cut patch. Consider for people who smoke upon waking. Consider alternative for severe eczema, psoriasis, or other generalized skin disorders. Taper off patches by no more than 7 mg per wk. If a patch dose decrease causes a significant increase in tobacco craving, that dose can be maintained for three to four weeks before an additional decrease is attempted. ³⁰ Use until feeling stabilized as a non- smoker. May be continued >12 wks; NRT safer than smoking. Consider NRT for longer period for comorbid psychiatric illness and/or substance use disorders. Off-label: If considering doses higher than 21 mg/d in patients who heavily smoke, shared decision making and a discussion about the risk of nicotine toxicity from all sources of nicotine is recommended.
Note: some NRT products available in Canada are not listed here (e.g., Sesh+, Zonnic).					

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PRESCRIPTION PHARMACOTHERAPIES					
Bupropion <i>Zyban*</i> , <i>G</i> 150mg SR tablets	150mg SR daily X 3d, then 150mg SR BID X 12 wks	\$60-\$80	Smoking Cessation Program*: Regular benefit for 12 consecutive wks per year (Zyban only)	Insomnia, agitation, tremor, decreased appetite, nausea, dry mouth.	Begin ≥ 1 wk before cessation of smoking. Longer duration of treatment can be considered, based on previous quit attempts and patient preference. Contraindications: seizure disorder, predisposition to seizure, pre- existing/current eating disorder, past/present excessive use of alcohol or benzodiazepines, on MAO inhibitors within 14d.
Varenicline <i>G</i> 0.5mg, 1mg tablets	0.5mg daily X 3 d, then 0.5mg BID X 4 days, then 1mg BID X 12 wks	\$60	Smoking Cessation Program*: Regular benefit for 12 consecutive wks per year	Nausea (dose dependent, initial titration may reduce), disordered sleep, including insomnia and abnormal (vivid or strange) dreams. Early concerns about neuropsychiatric and cardiovascular side effects are not supported by subsequent studies, and varenicline is generally considered safe.	Fixed quit approach: start 1-2 wks before set quit date. Flexible quit approach: quit smoking between days 8 and 35 of treatment. Gradual quit approach: Reduce smoking gradually (e.g., ≥ 50% reduction by 4 wks, ≥ 75% by 8 wks, 100% by 12 wks). Recommend 24- wk course. Precautions: using NRT concomitantly for operators of heavy machinery (until reaction to medication is known). If successfully quit at 12 wks but concern for relapse, may benefit from additional 12 wks. Dose tapering may minimize discontinuation symptoms (e.g., irritability, urge to smoke, depression). Symptoms observed in up to 3% of patients.

Abbreviations: **bid:** twice daily; **d:** day; **hr:** hours; **kg:** kilogram; **mg:** milligrams; **mins:** minutes; **prn:** as needed; **SR:** sustained release; **q:** every; **wks:** weeks; **y:** years of age.

^A For normal renal and hepatic function. Consult product monograph for detailed dosing instructions and dose adjustments for unique patient populations.

^B Drug costs are the average retail cost of generic products, when available. Current as of May 2024 and does not include retail markups or pharmacy fees.

^C PharmaCare coverage as of May 2024 (subject to revision). Regular Benefit: Eligible for full reimbursement. Limited Coverage: Requires Special Authority to be eligible for reimbursement. Non-benefit: Not eligible for reimbursement. Reimbursement is subject to the rules of a patient's PharmaCare plan, including any deductibles. In all cases, coverage is subject to drug price limits set by PharmaCare. See: <https://www.gov.bc.ca/pharmacareplans> and <https://www.gov.bc.ca/pharmacarepolicy> for further information. Special Authority drug list

^D Not an exhaustive list. Check the product monograph (<https://health-products.canada.ca/dpd-bdpp/index-eng.jsp>) or an interaction checker (e.g., Lexicomp^(c)) before prescribing.

References:

1. Anthenelli RM et al. Neuropsychiatric safety and efficacy of varenicline, bupropion, and nicotine patch in smokers with and without psychiatric disorders (EAGLES): a double-blind, randomised, placebo-controlled clinical trial. *Lancet*. 2016;387(10037):2507
2. Jobson MD. UpToDate [Internet]. Waltham, MA: UpToDate Inc.; c2019 [Accessed November 18, 2022]
3. Health Canada Drug Product Database Product Monographs. Ottawa, ON: Health Canada; 20194 [Accessed November 18, 2022].
4. Regier L et al. Tobacco Use Disorder/Smoking Cessation. [Internet]. Rx Files. Aug 2021. [Accessed November 24, 2022].

Note: Information on which products PharmaCare covers can be obtained using the B.C. PharmaCare Formulary Search (<https://pharmacareformularysearch.gov.bc.ca/>).

***BC Smoking Cessation Program**

Each calendar year, PharmaCare will cover one continuous 12 week treatment course for BC residents of all ages for either:

- nicotine replacement therapy (NRT) at 100% of the cost (no prescription required, specific products only), or
- prescription medications (subject to patient's PharmaCare plan and deductible):
 - bupropion (Zyban only), or
 - varenicline (generic only).

The 12-week course starts the day of the first dispense. The remaining fills must be dispensed within the 12-week period. Any refills after 12 weeks will not be covered by PharmaCare.

For more details, please see: **Smoking Cessation Program – for prescribers - Province of British Columbia (gov.bc.ca)**