

## First-Line Pharmacotherapies <sup>a</sup>

(Approved for use for smoking cessation by the FDA)

## Tobacco Prevention and Cessation Program Kentucky Department for Public Health

	Pharmacotherapy	Precautions <sup>c</sup>	Side Effects	Dosage	Use	Availability	Cost/day <sup>b</sup>
Non-Nicotine Medications Nicotine Replacement Therapy (NRT) Formulations	Nicotine Gum	Pregnancy (Category D) and breastfeeding Recent (≤ 2 weeks) myocardial infarction Serious underlying arrhythmias Serious/worsening angina pectoris Temporomadibular joint disease Caution with dentures Adolescents (<18 years)	Mouth soreness Stomach Ache Hiccups Effects associated with incorrect chewing technique: -Lightheadedness -Nausea/Vomiting -Throat & mouth irritation	1st cigarette ≤ 30 minutes after waking: 4mg 1st cigarette ≥ 30 minutes after waking: 2mg Use 1 piece every 1-2 hours Maximum, 24 pieces/day Park between cheek & gum when tingling sensation appears (15-30 chews), Resume chewing when tingle fades. Park in different areas of mouth. No food or beverage 15 min before or during use.	Up to 12 weeks	Nicorette®, Nicorette Mint®, generic products (OTC only) 2mg, 4mg Original, Mint, Orange	Brand name: 4 mg - \$4.24 (for 9 pieces)
	Nicotine Lozenge	Pregnancy and breastfeeding-not evaluated by the FDA Recent (≤ 2 weeks) myocardial infarction Serious underlying arrhythmias Serious/worsening angina pectoris Adolescents (<18 years)	Hiccups Heartburn Nausea Headache (on 4mg) Cough (on 4mg)	1st cigarette ≤30 min after waking: 4mg 1st cigarette >30 min after waking: 2mg Use 1 lozenge every 1-2 hours, 9-20 per day. Allow to dissolve between cheek & gum. Do not chew or swallow. Occasionally rotate to different areas of mouth.  No food or beverage 15 min before or during use.	Up to 12 weeks	Commit <sup>TM</sup> Lozenge, Nicorette Mini Lozenge generic products (OTC) 2mg, 4mg Original, Mint, Cherry	Brand name: 4 mg - \$3.99 (for 9 lozenges)
		Severe eczema or psoriasis  Pregnancy (Category D) and breastfeeding Recent (≤ 2 weeks) myocardial infarction  Serious underlying arrhythmias  Serious/worsening angina pectoris  Adolescents (<18 years)	Local skin reaction Sleep disturbances(insomnia, abnormal/vivid dreams) associated with nocturnal nicotine absorption	One patch per day If ≥ 10 cigs/day: 21mg 4 wks,14mg 2-4 wks,7mg 2-4 wks If < 10/day: 14mg 4 wks, then 7mg 4 wks	8-12 Weeks May wear patch for 16 hours if patient experiences sleep disturbances (remove at bedtime)	Nicoderm CQ®, Nicotrol, generic products (prescription and OTC),	Brand name: \$3.28 (1 patch) (14 patches per box)
	Nicotine Nasal Spray	Severe reactive airway disease Pregnancy (Category D) and breastfeeding Recent (< 2 weeks) myocardial infarction Serious underlying arrhythmias Serious/worsening angina pectoris Adolescents (<18 years)	Nasal and/or throat irritation Rhinitis Tearing Sneezing Cough Headache	1-2 doses/hour (8-40 doses/day) (one dose = one spray per nostril) Maximum: 5 doses/hour Patients should not sniff, swallow, or inhale through the nose as the spray is being administered	3-6 months	Nicotrol NS <sup>®</sup> (prescription only)	\$4.12 (8 doses)
	Nicotine Oral Inhaler	Recent (≤ 2 weeks) myocardial infarction Serious underlying arrhythmias Serious/worsening angina pectoris Bronchospastic disease Breastfeeding Pregnancy (Catagory D); and breastfeeding patients Adolescents (<18 years)	Local irritation of mouth & throat Cough Rhinitis Rhinitis Hiccups Dyspepsia	6-16 cartridges/day Individualize dosing; initially use 1 cartridge q 1-2 hours. Best effects with continuous puffing for 20 min. Do not inhale into the lungs, but "puff" as if lighting a pipe.	Up to 6 months Taper dosage during final 3 months. Keep in temp of 40° F or higher	Nicotrol® Inhaler (prescription only) 10mg cartridge delivers 4mg inhaled nicotine vapor	\$10.46 (6 cartridges)
	Bupropion SR	History of seizure History of eating disorder MAO inhibitor therapy in previous 14 days Current use of bupropion in any other form Pregnancy (Category C) and breastfeeding Warning: BLACK-BOXED WARNING for neuropsychiatric symptoms d	Insomnia Dry mouth Seizures (risk 1/1,000) [0.1%] Nervousness Rash Constipation	Days 1-3: 150 mg each morning Days 4-end: 150 mg twice daily Allow at least 8 hours between doses Avoid bedtime dosing to minimize insomnia Dose tapering is not necessary Can be used safely with NRT	Begin treatment 1-2 weeks before quit date Use for 7-12 weeks or maintenance up to 6 months	Zyban <sup>®</sup> , generic SR products (prescription only) 150 mg sustained- release tablet	150mg: Brand name:\$2.98 Generic: \$1.63 (2 tablets)
	Varenicline	Severe renal impairment (dosage adjustment is necessary) Currently undergoing dialysis Monitor for changes in mood, behavior, psychiatric symptoms, and suicidal ideation Pregnancy (Category C) and breastfeeding Warnings: BLACK-BOXED WARNING for neuropsychiatric symptoms. d Safety & efficacy have not been established in patients with serious psychiatric illness	Nausea Insomnia Abnormal / Vivid dreams Neuropsychiatric symptoms Constipation Flatulence Vomiting	Days 1-3: 0.5 mg every morning Days 4-7: 0.5 mg twice daily Days 8-end: 1 mg twice daily Take dose after eating with a full glass of water Dose tapering is not necessary Nausea & insomnia are side effects that are usually temporary	Begin treatment one week before quit date Use for 3 months; maintenance up to 6 months	Chantix™ (prescription only) .5mg, 1mg tablet	Starting pack: Brand name: \$9.30 Generic: \$8.20 (2 tablets) Continuing pack: Brand name: \$8.10 Generic: \$7.30

<sup>&</sup>lt;sup>a</sup>The information contained in this table is not comprehensive. Please see package insert for additional information.

<sup>&</sup>lt;sup>b</sup>Cost/day based on average retail prices of medications purchased at four chain pharmacies located in Kentucky, July 2013.

Quitting smoking, with or without medication, can result in nicotine withdrawal symptoms (such as depressed mood, agitation) or a worsening of underlying psychiatric illness, such as depression. Monitor patients for behavior or mood changes.

<sup>&</sup>lt;sup>d</sup> In July 2009, the FDA mandated that the prescribing information for all bupropion and varenicline containing products include a black-boxed warning highlighting the risk of serious neuropsychiatric symptoms, including changes in behavior, hostility, agitation, depressed mood, suicidal thoughts and behavior, and attempted suicide. Clinicians should advise patients to stop taking varenicline or bupropion SR and contact a healthcare provider immediately if they experience agitation, depressed mood, and any changes in behavior that are not typical of nicotine withdrawal, or if they experience suicidal thoughts or behavior. If treatment is stopped due to neuropsychiatric symptoms, patients should be monitored until the symptoms resolve.

<sup>\*</sup> Adapted from: Fiore MC, Jaén CR, Baker TB, et al. Treating Tobacco Use and Dependence: 2008 Update. Quick Reference Guide for Clinicians. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. April 2009.