

SECTION SEVEN

PROVIDING SUPPORT

Withdrawal Symptoms
Pharmacotherapy

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WITHDRAWAL SYMPTOMS

There are more than 4,000 chemicals found in tobacco products. Of these, nicotine is the primary component that acts on the brain. Nicotine is highly addictive. Over time, the body becomes both physically and psychologically dependent on nicotine. Addiction is characterized by compulsive drug seeking and use, even in the face of negative health consequences. With cigarette smoking, the nicotine rapidly reaches the brain, but the acute effect dissipates within a few minutes. To maintain the pleasurable effects, the smoker must continue dosing to prevent withdrawal symptoms. Physical withdrawal from nicotine is a temporary condition, but it can cause a fair amount of discomfort while it lasts.

While withdrawal is related to the pharmacological effects of nicotine, many behavioral factors can also affect the severity of withdrawal symptoms. For some people, the feel, smell, and sight of a cigarette and the ritual of obtaining, handling, lighting, and smoking the cigarette are all associated with the pleasurable effects of smoking and can make withdrawal or craving worse.

NIDA Research Report - Tobacco Addiction: *NIH Publication No. 06-4342*,
Printed 1998, Reprinted 2001, Revised 2006.

The peak of withdrawal symptoms usually occurs approximately 24 to 48 hours after quitting. REMEMBER that they are normal and temporary. To cope with nicotine withdrawal, you may encourage your patient to:

- ⊕ DELAY smoking until the urge passes – usually within 3 – 5 minutes
- ⊕ DISTRACT herself – engage in some other activity
- ⊕ DRINK water to fight off cravings
- ⊕ DEEP breaths – take 10 slow, deep breaths to relax
- ⊕ DISCUSS how she is feeling with someone

Listed on the next pages are symptoms of withdrawal that may last a few days or weeks after quitting tobacco use, with suggestions on how to handle them.

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HANDLING WITHDRAWAL SYMPTOMS		
YOU MAY FEEL:	WHY IT MAY HAPPEN:	WHAT TO DO ABOUT IT:
Irritable, nervous, anxious, grumpy	Withdrawal from nicotine	Take a brisk walk, exercise, call a friend, avoid stressful situations, try a deep breathing exercise, get enough rest, take a hot bath, drink water and fruit juices.
Unable to concentrate, less efficient, impaired speech, lack of coordination, feeling spaced out or in a fog	Withdrawal from carbon monoxide (poisonous gas) and nicotine	Don't expect too much of yourself - especially the first three days, try a deep breathing exercise, take a walk, plan work load to try to avoid stress during the first few weeks, be careful using equipment or driving, take time off, if necessary.
Lightheaded, dizzy, feeling over stimulated	More oxygen in the blood instead of carbon monoxide	Sit down and relax, take extra caution, change positions slowly.
Sleepy, weak, no energy	No more nicotine stimulation	Try to get more sleep, take a nap, try a deep breathing exercise, try not to push yourself, take it easy.
Insomnia or other sleep disturbances	Change in daily routine, body may need less sleep	Avoid caffeine after 6:00 p.m., use more energy during the day by getting more exercise, try a deep breathing exercise before bed, take a warm bath.
Hungry	Nicotine artificially suppresses appetite	Try not to eat more or eat low-calorie snacks like fresh fruits and vegetables (apples, carrot sticks), and low fat popcorn, exercise, take a walk, drink water.
Increased coughing	Excess mucous and tar in the lungs being cleared out	Drink plenty of fluids, chew sugarless gum, try cough drops or sugarless hard candy.
Constipated	Decreased intestinal activity	Include fiber or roughage foods like fresh fruits and vegetables, whole grains and bran in your diet, drink six to eight glasses of water each day, exercise, walk.

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HANDLING WITHDRAWAL SYMPTOMS		
YOU MAY FEEL:	WHY IT MAY HAPPEN:	WHAT TO DO ABOUT IT:
Headache	Better circulation sends more blood to the brain	Use over-the-counter pain relievers, take a warm bath or shower, use cold compresses, lie down and relax.
Irritated or itchy scalp, hands and/or feet	Better blood circulation to your extremities	Massage the area, use lotion on itchy hands and feet.
Tremors, shaky	Nicotine withdrawal	Sit down, tense and relax muscles. Take deep breaths.
Sweaty	Body's way of flushing out nicotine	Drink water, wear lighter clothing, take more showers.
Increased need to urinate	Body's way of getting rid of nicotine or may be from drinking more fluids	Take regular breaks at work, make frequent stops when traveling.
Dry mouth or tongue, sore throat or gums	Numbness from tobacco smoke wearing off, throat is healing	Sip ice-cold water or fruit juice, use mouthwash or oral antiseptics, chew sugarless gum.

Adapted from: **For You and Your Family - A Guide for Perinatal Trainers and Providers.**
California Department of Health Services, Tobacco Control Section, 1991.

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THE FACTS¹

Of the 44.5 million adult smokers in the United States, 70 percent want to quit and 40 percent make a serious quit attempt each year, but fewer than 5 percent succeed. With effective tobacco cessation intervention, successful quit rates could double or triple. To assist patients in quitting, health care providers must insure that all available interventions are accessible.

Behavior modification is an important aspect of any behavior change, especially for smoking cessation. However many individuals experience withdrawal symptoms that make behavior change alone more challenging when quitting smoking. The U.S. Public Health Service identified seven **first line** pharmacotherapies for smoking cessation and is recommending that smokers attempting to quit be urged and/or prescribed a medication.

These seven first-line therapies have been found to be safe and effective for tobacco dependence treatment and have been approved by the Food and Drug Administration (FDA):




- ✓ Bupropion SR (Zyban[®])
- ✓ Varenicline (Chantix[®])
- ✓ Nicotine gum
- ✓ Nicotine inhaler
- ✓ Nicotine nasal spray
- ✓ Nicotine patch
- ✓ Nicotine lozenge

Because of the lack of sufficient data to rank-order these medications, choice of a specific first-line pharmacotherapy must be guided by factors such as provider familiarity with the medications, contraindications for selected individuals, women's preference, woman's previous experience with a specific pharmacotherapy, and her specific characteristics such as history of depression or weight gain concerns.

Bupropion SR and nicotine replacement therapies, in particular nicotine gum, have been found to delay but not prevent weight gain.

Nicotine replacement therapies have been used safely in women with a history of cardiac disease. However, the safety of these products has not been established for the immediate post-myocardial period or with severe or unstable angina.

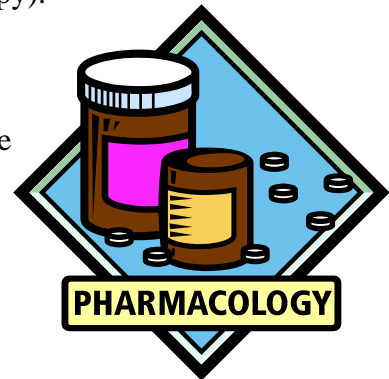
Other Points to Consider

-  If pharmacotherapy is used with lighter smokers, reducing the dose of first line therapies should be considered.
-  Pharmacotherapies can be used long term for women who report persistent withdrawal symptoms.
-  There is some evidence that combining the nicotine patch with either nicotine gum or nicotine nasal spray increases long term abstinence rates over those produced by a single form of NRT.

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Second-line medications (e.g. clonidine, nortriptyline) have been shown to be effective for treating tobacco dependence, but have a more limited role than first-line medications. The FDA **has not** approved them for tobacco dependence treatment, and there are more concerns about potential side effects.¹ For more information on second-line medications, please refer to the Public Health Services' Clinical Practice Guidelines for Treating Tobacco Use and Dependence (See Section VII – Resources for information on how to obtain a copy).

For women who are unable to use first-line medications because of contraindications or for whom first line medications are not helpful, second-line agents should be considered. A physician can determine the most appropriate form of pharmacotherapy to use for each individual.



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Pregnant & Breastfeeding Smokers

Pregnant smokers should receive encouragement and assistance in quitting throughout her pregnancy. Pregnant smokers should be offered extended or augmented psychosocial interventions that exceed minimal advice to quit.

Here is some information to consider regarding pregnant and breastfeeding smokers:

- Pregnant and breastfeeding smokers should first be encouraged to quit without pharmacotherapy.²
- Pharmacotherapy should be considered only when a pregnant woman is unable to quit by using behavioral cessation strategies. The 5A's approach has been shown to be an effective behavioral strategy for smoking cessation.
- The following five questions should be considered by physicians before recommending nicotine replacement therapy (NRT) to pregnant smokers:³
 1. Has the patient indicated that she wants to quit?
 2. Has the patient received effective counseling procedures and not been able to quit?
 3. Has the patient reported smoking 10 or more cigarettes per day?
 4. Are there coexisting medical problems that need to be addressed, such as drug dependence or depression?
 5. Is NRT acceptable to the patient? If so, which method does she prefer?
- The clinician and pregnant smoker must contrast the risks and unknown efficacy of pharmacotherapy in pregnant women with the risks of continued smoking.
- The U.S. Food and Drug Administration (FDA) has assigned a "Pregnancy Category C" warning to nicotine gum, which translates to a "risk cannot be ruled out." The FDA assigned a "Pregnancy Category D" warning to nicotine patches, which translates to a "positive evidence of risk."⁴
- The efficacy of nicotine replacement therapies has not been sufficiently tested in pregnant women, so the relative risks to benefits is unclear.
- The clinician should consider using medication doses that are at the low end of the effective dose range, and consider choosing delivery systems that yield intermittent, rather than continuous, drug exposure (e.g. nicotine gum rather than the nicotine patch).⁵

Quitting prior to conception or early in pregnancy is most beneficial, but health benefits result from quitting at any time.

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- For pregnant women who smoke heavily (more than a pack of cigarettes a day) and have been unresponsive to behavioral therapy, the clinician may need to consider adding a pharmacologic aid to their intervention plan.⁶
- Nicotine replacement products expose the fetus to nicotine, which may, by itself, lead to neurotoxicity.⁷
- Minimal amounts of nicotine are excreted into breast milk. Nicotine replacement therapy can be safely used by breastfeeding mothers.⁸
- Women who are nursing should not use bupropion hydrochloride (Zyban[®]) because the drug and its metabolites are secreted in breast milk.⁹

WOMEN AND ADOLESCENT SMOKERS

Consider this information regarding pharmacotherapy for women and adolescents smokers:

- Some studies have suggested that nicotine replacement therapies (gum and patch) may be less effective among women than among men. However, nicotine replacement therapies can help reduce withdrawal discomfort and are still recommended for use among women.¹⁰
- For adolescent smokers, clinicians may consider prescribing bupropion SR or nicotine replacement therapy when nicotine dependence is evident and the adolescent wants to quit using tobacco.
- There is **NO** evidence that bupropion SR or nicotine replacement therapy is harmful to children or adolescents. The degree of dependence, number of cigarettes per day, and body weight are factors that should be considered when prescribing or recommending pharmacotherapy for this age group.

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For up-to-date information on first-line pharmacotherapy costs and insurance coverage, visit Quit Now NC at <http://www.quitnownc.org/> .

FIRST-LINE PHARMACOTHERAPIES FDA-APPROVED FOR SMOKING CESSATION				
DRUG	PRECAUTIONS CONTRAINDICATIONS	SIDE EFFECTS	DOSAGE DURATION	AVAILABILITY
<p>Bupropion Hydrochloride SR</p> <p>Affects chemicals in the brain that are related to nicotine cravings.</p>	<ul style="list-style-type: none"> • History of seizure • History of eating disorders • Lactation • Hepatic or renal impairment • Do not use Wellbutrin[®] or Wellbutrin SR[®] simultaneously with Zyban[®] 	<ul style="list-style-type: none"> • Insomnia • Dry mouth 	<p>150 mg every morning for 3 days then 150 mg twice daily for 7 – 12 weeks</p> <p>Begin treatment 1 – 2 weeks pre-quit.</p> <p>Maintenance up to 6 months</p>	<p>Zyban[®] (prescription only)</p>
<p>Zyban[®] is a medication, which is used with patients who cannot tolerate nicotine replacement therapy or those who prefer non-nicotine treatment. Zyban[®] is an anti-depressant whose mechanism of action for smoking cessation is unknown. It may be related to dopaminergic and/or nonadrenergic properties. Pregnancy Category B (no evidence of risk in humans)</p> <p style="text-align: center;">Patient Instructions</p> <ul style="list-style-type: none"> • Set a quit date and begin taking Zyban[®] 7-14 days before this date. • Try to take the two doses at least 8 hours apart. • Avoid doses at bedtime to minimize insomnia effects. Take the second dose in the early part of the afternoon (preferably before 4:00 PM). <p>Some managed care organizations may cover the cost of Zyban[®] as a member benefit.</p>				

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FIRST-LINE PHARMOCOTHERAPIES FDA-APPROVED FOR SMOKING CESSATION				
DRUG	PRECAUTIONS CONTRAINDICATIONS	SIDE EFFECTS	DOSAGE DURATION	AVAILABILITY
<p>Nicotine Gum¹¹</p> <p>Replaces nicotine by absorption through the buccal mucosa (lining of the inside of the cheeks and lips)</p>	<ul style="list-style-type: none"> • Pregnancy • Lactation • Cardiovascular disease (CVD) • Peripheral vascular disease • Endocrine disorders • Oral or pharyngeal inflammation on esophagitis • Gastric ulcers 	<ul style="list-style-type: none"> • Mouth soreness • Dyspepsia (indigestion) • Mechanical injury to oral mucosa (lining of the mouth) and teeth • Jaw ache • Nausea • Vomiting • Hiccups • Excess salivation 	<p>1 – 24 cigarettes per day: 2 mg gum (up to 24 pieces per day)</p> <p>25+ cigarettes per day: 4 mg gum (up to 24 pieces per day)</p> <p>Up to 12 weeks usage</p>	<p>Over-the-counter Nicorette[®] is not for sale to those under 18 years of age.</p>
Patient Instructions:				
<ul style="list-style-type: none"> • Do not smoke while using the gum. • Use one piece of gum at a time and use on a fixed schedule (1 piece/hour). • Chew gum slowly until a peppery taste or tingling of the gums occurs. Then, stop chewing and park the gum in between the gums and cheek until tingling stops. Start chewing gum again and repeat the parking and chewing process for about 30 minutes. • Parking the gum is necessary for the nicotine to absorb through the buccal mucosa. If individuals do not park the gum, more nicotine will be swallowed resulting in side effects such as nausea and vomiting. • Do not eat or drink anything 15 minutes prior to and during the use of the gum. • Patients should chew no more than 30 pieces per day of the 2-mg variety. • Patients should chew no more than 30 pieces per day of the 4-mg variety. <p>Cost is approximately \$30 for a box of 48 pieces.</p>				

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FIRST-LINE PHARMOCOTHERAPIES FDA-APPROVED FOR SMOKING CESSATION				
DRUG	PRECAUTIONS CONTRAINDICATIONS	SIDE EFFECTS	DOSAGE DURATION	AVAILABILITY
<p>Nicotine Inhaler¹²</p> <p>Replaces nicotine by absorption through the buccal mucosa.</p>	<ul style="list-style-type: none"> • Pregnancy • Lactation • Cardiovascular disease (CVD) • Peripheral vascular disease • Endocrine disorders • Asthma • Chronic lung disorders 	<ul style="list-style-type: none"> • Local irritation of mouth and throat • Cough • Rhinitis (inflammation of the nasal mucous membrane) 	<p>6 – 16 cartridges per day</p> <p>Up to 6 months</p>	<p>Nicotrol Inhaler (prescription only)</p>
Patient Instructions:				
<ul style="list-style-type: none"> • Do not smoke while using the inhaler. Discontinue use if patient continues to smoke. • Place cartridge into the mouthpiece and press the two halves together, breaking the seal. • Inhale air through the mouthpiece (saturates with nicotine). • Use shallow, frequent puffs or deep inhalations continuously for 20 minutes. Best success achieved in clinical trials by continuous puffing for 20 minutes. • Cartridges are used up after 20 minutes of active puffing. • Once a cartridge is open, it is only good for 24 hours. • Discard cartridges in a way that prevents possible exposure to children and pets (used cartridges still contain nicotine). <p>Cost is approximately \$40 for a box of 42 cartridges.</p>				

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FIRST-LINE PHARMOCOTHERAPIES FDA-APPROVED FOR SMOKING CESSATION				
DRUG	PRECAUTIONS CONTRAINDICATIONS	SIDE EFFECTS	DOSAGE DURATION	AVAILABILITY
<p>Nicotine Nasal Spray¹³</p> <p>Replaces nicotine by absorption through the nasal mucosa (lining of the nasal cavity).</p>	<ul style="list-style-type: none"> • Pregnancy • Lactation • Cardiovascular disease (CVD) • Peripheral vascular disease • Endocrine disorder • Asthma or chronic nasal disorders 	<ul style="list-style-type: none"> • Nasal irritation • Runny nose • Throat irritation • Watery eyes • Sneezing • Coughing • Unpleasant taste 	<p>1 –2 sprays per hour in each nostril</p> <p>8 - 40 doses per day</p> <p>3 – 6 months</p>	<p>Nicotrol NS (prescription only)</p>
<p>Patient Instructions:</p> <ul style="list-style-type: none"> • Do not smoke while using the nasal spray. • Prime pump before first use only. • Blow nose and then insert the tip of the nasal spray bottle into nostril as far as it is comfortable. • Breathe through your mouth while spraying. DO NOT sniff or inhale. • Wait 2-3 minutes before blowing nose. • Use a scheduled dose instead of using only with cravings for nicotine. <p>Cost is approximately \$40 for one 10-ml bottle (200 sprays/bottle).</p>				

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FIRST-LINE PHARMOCOTHERAPIES FDA-APPROVED FOR SMOKING CESSATION				
DRUG	PRECAUTIONS CONTRAINDICATIONS	SIDE EFFECTS	DOSAGE DURATION	AVAILABILITY
<p>Nicotine Lozenge¹⁴</p> <p>Replaces nicotine by absorption through the buccal mucosa.</p>	<ul style="list-style-type: none"> • Pregnancy • Lactation • Heart disease • Recent heart attack • Irregular heartbeat • High blood pressure not controlled by medication • Stomach ulcer • Diabetes 	<ul style="list-style-type: none"> • Indigestion or heartburn • Mouth soreness • Severe sore throat • Irregular heartbeat or palpitation 	<p>2 mg and 4 mg strength</p> <p>9 lozenges per day for 6 – 12 weeks</p>	<p>Over-the-counter</p>
Patient Instructions:				
<ul style="list-style-type: none"> • Do not smoke, chew tobacco, use snuff, or use a nicotine patch or other nicotine containing products while using the lozenges. • Ask a doctor or pharmacist before use if you are using a non-nicotine stop smoking drug; or taking prescription medicine for depression or asthma. • Do not chew or swallow a lozenge; occasionally move lozenge from one side of the mouth to the other until completely dissolved (20-30 minutes). • Do not eat or drink 15 minutes before using or while the lozenge is in your mouth. • Do not use more than one lozenge at a time or continuously use one lozenge after another since this may cause hiccups, heartburn, nausea, or other side effects. • Do not use more than five lozenges in six hours. • Do not use more than 20 lozenges per day. • Keep out of reach of children and pets – lozenge may have enough nicotine to make children and pets sick. If you need to remove a lozenge, wrap it in paper and throw away in the trash. <p>Cost is approximately \$40 for a pack of 72 lozenges.</p>				

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FIRST-LINE PHARMOCOTHERAPIES FDA-APPROVED FOR SMOKING CESSATION				
DRUG	PRECAUTIONS CONTRAINDICATIONS	SIDE EFFECTS	DOSAGE DURATION	AVAILABILITY
<p>Nicotine Patch¹⁵</p> <p>Replaces nicotine by absorption through the skin</p>	<ul style="list-style-type: none"> • Pregnancy • Lactation • Cardiovascular disease (CVD) • Peripheral vascular disease • Endocrine disorders 	<ul style="list-style-type: none"> • Local skin reaction • Insomnia • Erythema • Pruritis • Edema • Headache • Up to 50% of users will have local skin reaction 	<p>21 mg/24 hours for 4 weeks then 14 mg/24 hours for 2 weeks then 7 mg/24 hours for 2 weeks then 15 mg/16 hours for 8 weeks</p>	<p>Over-the-counter</p> <p>Habitrol[®], Nicoderm[®] CQ, Nicotrol[®] are not for sale to those under 18 years of age.</p> <p>Generic versions available.</p>
Patient Instructions:				
<ul style="list-style-type: none"> • Do not smoke while using the patch. • Patches should be applied as soon as the woman wakes up on her quit date. • Rotate the patch site to minimize skin irritation. • If insomnia occurs, remove patch before going to bed or use a 16 hour patch (Nicotrol[®]). • Remove the old patch and apply a new patch, in a different location every day. Put the patch between the neck and waist in a place that is relatively hairless and where the skin is not broken. • Wash hands with water only after applying the patch; soap may increase nicotine absorption. • Do not touch face or eyes immediately following the application of the patch. • Discard unused patches in a protective pouch (such as a zip lock bag) and discard in a place where children and animals cannot reach it. Used patches may still contain nicotine. <p>Cost is approximately \$200 for an 8 week supply.</p>				

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FIRST-LINE PHARMOCOTHERAPIES FDA-APPROVED FOR SMOKING CESSATION				
DRUG	PRECAUTIONS CONTRAINDICATIONS	SIDE EFFECTS	DOSAGE DURATION	AVAILABILITY
<p>Varenicline (Chantix®)¹⁶</p> <p>Interferes with nicotine receptors in the brain by lessening pleasurable physical effects of smoking as well as reduces nicotine withdrawal symptoms</p>	<ul style="list-style-type: none"> • Under age 18 years • Pregnancy • Lactation 	<ul style="list-style-type: none"> • Nausea • Insomnia • Abnormal dream • Constipation • Flatulence • Vomiting • Changes in taste 	<p>1.0 mg twice daily</p>	<p>Chantix® (prescription only)</p>
Patient Instructions:				
<ul style="list-style-type: none"> • Choose a quit date when you will stop smoking. • Start taking Chantix® 1 week (7 days) before the quit date. This lets Chantix® build up in your body. You can keep smoking during this time. Make sure that you try and stop smoking on your quit date. If you slip, try again. Some people need a few weeks for Chantix® to work best. • Take Chantix® after eating and with a full glass (8 ounces) of water. • If you miss a dose, take it as soon as you remember. If it is close to the time for your next dose, wait. Just take your next regular dose. • Most people will keep taking Chantix® for up to 12 weeks. If you have completely quit smoking by 12 weeks, ask your doctor if another 12 weeks of Chantix® may help you stay cigarette-free. <p>Some managed care organizations may cover the cost of Chantix® as a member benefit.</p>				

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Behavior Modification Programs:

Nicotrol® Pathways to Change® and Nicotrol® Helping Hand™ Support Program: offers personal quit guide to suit the needs of the individual and assist them in progressing through the stages of behavior change. Web-site: http://www.nicotrol.com/9_program.asp

Nicoderm CQ® and COMMIT™ Lozenge Committed Quitters®: personalized stop smoking program, which lasts 8-12 weeks. This program offers customized materials according to an individual's smoking history and reasons for quitting. Web-site: <http://www.quit.com/>

Zyban Advantage Plan®: offers a number of personal guides designed to help individuals quit successfully. Web-site: http://zyban.ibreathe.com/zp_1000.shtml

Chantix®: offers a GETQUIT™ Support Plan to help individuals in their cessation plan. Website: <http://www.chantix.com>

Price Comparison

Individuals who smoke one pack of cigarettes per day and spend \$2.50 per pack would save an estimated \$77.50 per month by quitting smoking. This amount comes to \$912.50 per year.

The cost for nicotine replacement therapy is comparable and possibly less if the individual's insurance company contributes. Often coupons for \$5 off the cost of NRT are available through many of the pharmaceutical companies' behavior modification programs.

For more information on nicotine replacement therapy, contact your local drug representative or pharmacist. Keep in mind that some nicotine replacement therapies are available over-the-counter, such as the patch and the gum. However, the nicotine inhaler and nasal spray are by prescription only.

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¹ Unless otherwise noted, information in this section was derived from: Fiore MC, Bailey WC, Cohen SJ, et. al. *Treating Tobacco Use and Dependence*. Quick Reference Guide for Clinicians. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. October 2000. Available on-line at:

<http://www.surgeongeneral.gov/tobacco/clinpack.html>

² U.S. Department of Health and Human Services. *Women and Smoking: A Report of the Surgeon General*. Rockville, Maryland: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General, 2001.

³ Windsor R, Oncken C, Henningfield J, Hartmann K, Edwards N. Behavioral and Pharmacological Treatment Methods for Pregnant Smokers: Issues for Clinical Practice. *JAMWA* 2000; 55(5): 304-310.

⁴ U.S. Department of Health and Human Services. *Women and Smoking: A Report of the Surgeon General*. Rockville, Maryland: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General, 2001.

⁵ Dempsey DA, Benowitz NL. Risks and benefits of nicotine to aid smoking cessation in pregnancy. *Drug Safety* 2001; 24(4): 277-322.

⁶ The American College of Obstetricians and Gynecologists. *Smoking Cessation During Pregnancy: A Clinician's Guide to Helping Pregnant Women Quit Smoking*. Washington, DC: ACOG, 2002.

⁷ Ibid.

⁸ Dempsey DA, Benowitz NL. Risks and benefits of nicotine to aid smoking cessation in pregnancy. *Drug Safety* 2001; 24(4): 277-322.

⁹ Zyban[®] Bupropion HCL. Important Safety Information About Zyban[®]. Product information. Available at: http://us.gsk.com/products/assets/us_zyban.pdf

¹⁰ U.S. Department of Health and Human Services. *Women and Smoking: A Report of the Surgeon General*. Rockville, Maryland: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General, 2001.

¹¹ Information obtained from the American Cancer Society website at : http://www.cancer.org/docroot/PED/content/PED_10_13X_Guide_for_Quitting_Smoking.asp

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Information obtained from the Chantix website http://www.chantixmd.com/content/chantixmd_home.jsp