

IMPORTANT POINTS ABOUT MEDICATIONS

- The U.S. Food & Drug Administration (FDA) advises that there are significant health benefits to quitting smoking.
- The health benefits of quitting smoking include a reduction in the chance of developing lung disease, heart disease, or cancer.
- Nicotine is the **ADDICTIVE** part of tobacco smoke, but **NOT** the most dangerous part
 - **4000 OTHER TOXINS** cause much of the disease
 - Nicotine does **NOT** cause lung cancer or emphysema
- People do **NOT** generally become addicted to medication
 - Lower dose of nicotine
 - Slower time to reach the brain
- People don't **USE ENOUGH** medication or stop **TOO EARLY**
 - Medications are **SAFE** and **EFFECTIVE**
 - Overdose is very uncommon
 - More medication usually means more comfortable
 - Plan on a minimum of **2 MONTHS** of medication
 - Use medications as long as needed
- **COMBINATIONS** work better than single medications

LONG-ACTING MEDICATIONS
(skin patch, bupropion, varenicline)

AND

SHORT-ACTING MEDICATIONS
(gum, lozenge, inhaler, nasal spray)



Transdermal nicotine (skin patches) (LONG-ACTING MEDICINE)

NicoDerm CQ, Nicotrol, generics (about \$2-3/day, \$60-90/30 days)

Advantages: Once a day; over the counter; can decrease morning cravings if worn at night

Disadvantages: Does not provide immediate symptom relief.

How it works

Nicotine skin patches help stop smoking by taking the edge off cigarette cravings without providing the tars and poisonous gases found in cigarettes. The patch cannot be put on and removed as a substitute for a cigarette because the patch delivers nicotine slowly (may take 6 to 8 hours to reach peak brain concentrations).

The patch must be applied once per day, usually at the same time. Remove the patch from the package, peel off the protective strip, and immediately apply the patch to a clean, dry, hairless area of skin on the upper chest, upper arm, or hip as directed by the package directions. With the sticky side touching the skin, press the patch in place with the palm of your hand for about 10 seconds. Be sure the patch is held firmly in place, especially around the edges. Wash your hands with water alone after applying the patch. Avoid areas of irritated, oily, scarred, or broken skin. If the patch falls off or loosens, replace it with a new one. The patch may be worn even while showering or bathing. **The NicoDerm CQ can be used for 16 to 24 hours. The Nicotrol patch should be removed at bedtime.** Dispose of the patch by folding it in half with the sticky sides touching. Apply the next patch to a **different skin area** to prevent skin irritation.

The patches are available in different shapes and sizes. A larger patch delivers more nicotine through the skin. Nicotine patches may be used from 6 to 20 weeks. Your doctor may suggest shorter or longer treatments for you. Follow your doctor's instructions.

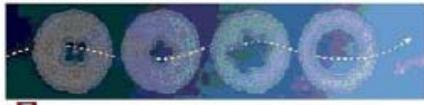
Side-effects

Skin irritation, which may improve with a different brand and removing the patch at bedtime. Other side-effects may include difficulty falling asleep, abnormal dreams, rapid heart rate, and increased blood sugar. Caution within 6 weeks of a heart attack. Do not use during pregnancy; nicotine skin patches are classified as a pregnancy category 'D' drug (substantial risk to the fetus). Smoking during pregnancy is dangerous to the fetus.

Drug-drug interactions

Should not be used with dofetilide (Tikosyn). Stop smoking completely when you use the nicotine skin patch. Nausea, headache, vomiting, dizziness, upset stomach, and fatigue may be more common when varenicline and the nicotine patch are used together.

These are a few of the most common side-effects and interactions. If you have questions or have problems when using this medicine, contact your doctor/pharmacist.



Bupropion (LONG-ACTING MEDICINE)

Wellbutrin SR/XL, Zyban, generics
(about \$2-6/day, \$60-180/30 days)

Advantages: Less weight gain after you stop smoking.

Disadvantages: Side effects common; passive - does not provide rapid relief from cravings; requires prescription.

How it works

Bupropion was originally an antidepressant, but it was found to be effective in helping smokers to quit even if not depressed. It works by increasing certain types of brain activity. Bupropion takes several days to work and should be started **1 week before the quit date**.

Treatment should begin with 150 mg/day on days 1 to 3, then increased to 300 mg/day on day 4. The sustained-release tablet (bupropion SR, Wellbutrin SR, Zyban) is usually taken twice a day, with doses at least 8 hours apart. The extended-release tablet (Wellbutrin XL) is usually taken once daily in the morning. The maximum recommended dose is 300 mg/day and may need to be reduced if you have liver disease. Treatment is then continued for 7 to 12 weeks. Your doctor may suggest shorter or longer treatments for you. Follow your doctor's instructions.

Side-effects

Difficulty falling asleep and dry mouth. Other side-effects include headache, dizziness, anxiety, increased heart rate, and weight loss. Rare but serious side-effects include seizures and a life-threatening type of rash. Patients with seizures, stroke, brain tumor, brain surgery or serious head injury, or anorexia-bulimia should not take bupropion. Pregnancy category 'C' (possibly unsafe). It is not unusual to have symptoms such as irritability, feeling anxious, depressed mood, and trouble sleeping when you quit smoking, independent of whether you are taking bupropion. The FDA advises that bupropion use may lead to changes in behavior, hostility, agitation, depressed mood, suicidal ideation, suicidal behavior, or attempted suicide. If this occurs you should stop the use of bupropion and contact your health care provider immediately.

Drug-drug interactions

Should not be taken with other prescriptions for Wellbutrin or MAO-inhibitors, alcohol or ginkgo biloba.

These are a few of the most common side-effects and interactions. If you have questions or have problems when using this medicine, contact your doctor/pharmacist.



Varenicline (LONG-ACTING MEDICINE)

Chantix (about \$4/day, \$120/30 days)

Advantages: Most effective at reducing withdrawal and preventing relapse. Varenicline may be 'the most effective drug available in increasing tobacco cessation quit rates.

Disadvantages: Does not provide immediate symptom relief; requires prescription. Varenicline can lead to new onset of depressed mood, suicidal ideation, and changes in emotion and behavior.

How it works

This medicine reduces the pleasure of smoking, as well as withdrawal symptoms when smokers quit. Varenicline takes several days to work and should be started **1 week before the quit date**.

The starting dose is 0.5 mg once daily for 3 days, followed by 0.5 mg twice daily for 4 to 7 days, then 1 mg twice daily for the remainder of 12 weeks. The dose of varenicline should be reduced in patients with severe kidney disease. Patients who have stopped smoking during the first 12 weeks should continue for another 12 weeks to reduce the risk of relapse. Your doctor may suggest shorter or longer treatments for you. Follow your doctor's instructions.

Side-effects

The most common side-effect is nausea (which is generally mild or moderate, but becomes less severe with continued use and with lower doses). Take with food. Other side-effects include abnormal dreams, constipation, vomiting, gas, and dry mouth. Do not use with severe kidney disease. Patients who stop smoking may gain an average of 6 pounds in weight. The FDA classified this medication as category 'C' (possibly unsafe) for use during pregnancy. It is not unusual to have symptoms such as irritability, feeling anxious, depressed mood, and trouble sleeping when you quit smoking, independent of whether you are taking varenicline. Varenicline may lead to changes in behavior, hostility, agitation, depressed mood, suicidal ideation, suicidal behavior, or attempted suicide. If this occurs you should stop the use of varenicline and contact your health care provider immediately.

Drug-drug interactions

Cimetidine (Tagamet) may increase blood levels of varenicline. Nausea, headache, vomiting, dizziness, upset stomach, and fatigue may be more common when varenicline and the nicotine patch are used together.

These are a few of the most common side-effects and interactions. If you have questions or have problems when using this medicine, contact your doctor/pharmacist.



Nicotine Gum (SHORT-ACTING MEDICINE)

Nicorette, generics (about \$6-8/day, \$180-240/30 days)

Advantages: Over the counter; provides symptom relief.

Disadvantages: More difficult to chew than chewing gum.

How it works

Nicotine gum helps stop smoking by taking the edge off cigarette cravings without providing the tars and poisonous gases found in cigarettes. Nicotine gum delivers nicotine to the brain more quickly than the patch, but is slower than the nicotine nasal spray or a cigarette. This makes the "hit" less intense with the gum than with a nicotine nasal spray or a cigarette.

Nicotine gum is not designed to be chewed like normal gum. Rather it is used in the "**chew and park**" method. Chew the nicotine gum a few times at a time to break it down, then park it between your gum and cheek and leave it there. The nicotine will make its way into your system through the blood vessels between your gum and cheek. If you chew without parking, the nicotine will be released directly into the saliva in your mouth, which, when swallowed, may cause a stomach ache and a craving for cigarettes. Do not eat or drink for 15 minutes before using or while chewing the gum. Chew the gum slowly on and off for 30 minutes to release most of the nicotine.

The over-the-counter gum is available in 2mg doses (for smokers of 24 or fewer cigarettes each day) and 4mg doses (for smokers of 25 or more cigarettes each day). One piece of gum is one dose. The maximum dose is 24 per day. Use the gum every day for about a month or so, then start to reduce the number of pieces you chew a day as needed to avoid withdrawal symptoms. Discontinue use after three months. Your doctor may suggest shorter or longer treatments for you. Follow your doctor's instructions.

Side-effects

Indigestion, nausea, gas, unpleasant taste, hiccups, sore mouth, sore throat, and a sore jaw. Dentures or other dental work may be damaged because nicotine gum is stickier and harder to chew than ordinary gum. Nicotine gum may increase blood sugar, blood pressure, or heart rate. Avoid food and acidic drinks 15 minutes before and while using. Do not use during pregnancy; nicotine gum is classified as pregnancy category 'C' drug (possibly unsafe). Smoking during pregnancy is dangerous to the fetus.

Drug-drug interactions

Should not be used with dofetilide (Tikosyn). Stop smoking completely when you use the nicotine gum.

These are a few of the most common side-effects and interactions. If you have questions or have



problems when using this medicine, contact your doctor/pharmacist.

Nicotine Lozenge (SHORT-ACTING MEDICINE)

Commit (about \$7/day, \$210/30 days)

Advantages: Ease of use; over the counter; provides symptom relief.

Disadvantages: Costly (no generic).

How it works

Nicotine lozenges help stop smoking by taking the edge off cigarette cravings without providing the tars and poisonous gases found in cigarettes. Nicotine lozenge comes in the form of a hard candy, and releases nicotine as the lozenge slowly dissolves in the mouth. Do not eat or drink 15 minutes before using the lozenge or while it is in your mouth. Each lozenge will last about 20-30 minutes. Biting or chewing the lozenge will reduce the dose of nicotine and result in indigestion and/or heartburn.

Nicotine lozenges are available in 2mg or 4mg doses. One lozenge is equal to one dose; maximum dosage should not exceed 20 lozenges per day. Do not use nicotine lozenges for longer than 12 weeks. Slowly reduce the number of lozenges during the 12-week period until you are completely nicotine-free. If you feel the need to continue using the lozenges after 12 weeks, contact your doctor. Your doctor may suggest shorter or longer treatments for you. Follow your doctor's instructions.

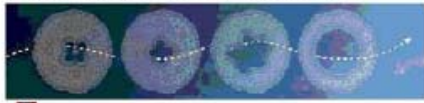
Side-effects

Heartburn, hiccup, nausea, and headache. Nicotine lozenges may increase blood sugar, blood pressure, or heart rate. Avoid food and acidic drinks before and during use. Do not use during pregnancy; nicotine lozenges are classified as a pregnancy category 'N/A' drug. Smoking during pregnancy is dangerous to the fetus.

Drug-drug interactions

Should not be used with dofetilide (Tikosyn). Stop smoking completely when you use the nicotine lozenge.

These are a few of the most common side-effects and interactions. If you have questions or have problems when using this medicine, contact your doctor/pharmacist.



Nicotine Inhaler (SHORT-ACTING MEDICINE)

Nicotrol Inhaler (about \$5/day, \$150/30 days)

Advantages: Provides symptom relief when used as needed; mimics hand-to-mouth behavior of smoking.

Disadvantages: Costly; visible to others when used; requires prescription.

How it works

Nicotine inhalers help stop smoking by taking the edge off cigarette cravings without providing the tars and poisonous gases found in cigarettes. Although similar in appearance to a cigarette, the inhaler delivers nicotine into the mouth, not the lungs, and enters the body more slowly than the nicotine in cigarettes.

Nicotine inhaler cartridges deliver nicotine when you puff on them. Use the inhaler when you have a craving for a cigarette. Each inhaler cartridge delivers up to 400 puffs. It takes at least 80 puffs to obtain the amount of nicotine delivered by one cigarette. You may use up 1 cartridge all at once or puff on it for a few minutes at a time until the nicotine is finished. The best effect is achieved by frequent puffing over 20 minutes. You may want to try different schedules to see what works best for you.

The initial dosage is individualized. The adult dose is 6 to 16 cartridges per day for up to 12 weeks, after which the dose is to be gradually reduced over the next 6 to 12 weeks until you are not using it any more. Your doctor may suggest shorter or longer treatments for you. Follow your doctor's instructions.

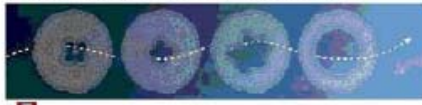
Side-effects

Irritation of the throat and mouth and cough. These side-effects should get better after 1-2 days. Other side-effects may include indigestion, rapid heart rate, and increased blood sugar or blood pressure. Avoid food and acidic drinks before and while using. Do not use during pregnancy; the nicotine inhaler is classified as a pregnancy category 'D' drug (substantial risk to the fetus). Smoking during pregnancy is dangerous to the fetus.

Drug-drug interactions

Should not be used with dofetilide (Tikosyn). Stop smoking completely when you take the nicotine inhaler.

These are a few of the most common side-effects and interactions. If you have questions or have problems when using this medicine, contact your doctor/pharmacist.



Nicotine Nasal Spray (SHORT-ACTING MEDICINE)

Nicotrol NS (about \$3/day, \$90/30 days)

Advantages: Provides rapid symptom relief; faster than any other medication.

Disadvantages: Costly; visible to others when used; requires prescription.

How it works

Nicotine nasal spray helps stop smoking by taking the edge off cigarette cravings without providing the tars and poisonous gases found in cigarettes. Nicotine nasal spray, dispensed from a pump bottle similar to over-the-counter decongestant sprays, relieves cravings for a cigarette. Nicotine is rapidly absorbed through the nasal membranes and reaches the bloodstream faster than any other product used as nicotine replacement therapy, giving a rapid nicotine "hit". This feature makes it attractive to some smokers trying to quit when used with other nicotine products that provide a constant nicotine dose, such as the nicotine patch. The nicotine "hit" from nicotine nasal spray, however, is slower than what smokers get from cigarettes.

Usual dose is one spray in each nostril per hour. The maximum recommended dose is 5 sprays in each nostril per hour or 40 sprays in each nostril per day. Follow your doctor's instructions.

Side-effects

Irritation of the nose and throat, cough, sneezing, watery eyes, runny nose, and nausea. These side-effects usually last only for a few seconds and improve after about 1 week. Nicotrol may increase blood sugar, blood pressure, or heart rate. Do not use during pregnancy; nicotine nasal spray is classified as a pregnancy category 'D' drug (substantial risk to the fetus). Smoking during pregnancy is dangerous to the fetus.

Drug-drug interactions

Should not be used with dofetilide (Tikosyn). Stop smoking completely when using the nicotine spray.

These are a few of the most common side-effects and interactions. If you have questions or have problems when using this medicine, contact your doctor/pharmacist.