

Prescription Medications to Help You Stop Smoking

Congratulations! Making the decision to stop using tobacco is the most important thing you can do to improve and protect your health, as well as the health of those around you. Trying to stop on your own, sometimes called “cold turkey,” may be difficult and uncomfortable. Using FDA-approved medications is one of the most effective methods for reducing withdrawal symptoms and improving control over the desire to smoke. A combination of counseling and medication can double your chance of successfully stopping tobacco use.



This fact sheet gives you information about prescription medications that can help you stop smoking. See also the ATS Patient Information Series for more help in stopping and about over the counter medicines at www.thoracic.org.

Are there medications to help me stop smoking?

There are 7 FDA-approved medications for tobacco treatment:

- Varenicline (Chantix)
- Bupropion (Wellbutrin or Zyban)
- Nicotine Replacement Therapy:
 - Nicotine Gum
 - Nicotine Lozenges
 - Nicotine Patches
 - Nicotine Inhalers
 - Nicotine Nasal Spray

Nicotine gum, lozenges, and patches can be bought over the counter. Nicotine inhalers, nicotine spray, bupropion and varenicline are available **only** by prescription. All 7 of these medications are approved for tobacco users 18 years of age and older. Below is information on the 4 prescription-only medicines, how they are taken, and some of the possible side effects.

What is varenicline (Chantix®)?

Varenicline is a pill you take once or twice a day. Varenicline works by blocking the areas of the brain that are affected by nicotine. Typically you start taking varenicline 7 days before your target quit date. Some people may require a longer period of varenicline treatment before their quit date. Usually, you will be advised to take a smaller dose for a few days and then increase to a higher dose. Varenicline is taken for 12 weeks. If, after taking varenicline for 12 weeks, you have successfully stopped using tobacco, you can consider taking it for an additional 12 weeks to prevent relapse.

Although many people have successfully stopped tobacco use with varenicline, some have had side effects with this medicine, including nausea or unusual, vivid, or upsetting dreams. Nausea can be reduced by taking varenicline after eating and with a full glass of water. Troubling dreams can be reduced by taking the evening dose of varenicline earlier in the day or by skipping the evening dose. If you have kidney problems, talk to your healthcare provider before using varenicline. Findings from several studies show no link between varenicline and suicidal thoughts or suicidal actions. The box warning for serious mental health side effects from the drug label was removed in December 2016. People taking varenicline should use caution when driving or operating heavy machinery until they know how the drug will affect them. Little is known about the safety of varenicline in pregnancy, and so it is generally not used in pregnant women.

What is bupropion (Wellbutrin®, Zyban®)?

Bupropion is a pill that you take once or twice a day. It is the same drug as the antidepressant Wellbutrin®. Bupropion works by making tobacco less desirable to you. Most people take bupropion for 7-14 days before their target quit date, though a longer pre-treatment may be needed in some people. If, after taking bupropion for 12 weeks, you have successfully stopped using tobacco, you can consider taking it for longer to prevent relapse.

Most people tolerate bupropion well. Based on the results of a large clinical trial, the boxed warning for serious mental health side effects was removed from the drug label in December 2016. You should not take bupropion if you have a history of seizures or have an eating disorder (such as anorexia or bulimia). Some people have had difficulty with sleeping, difficulty concentrating, seizures, headache, or dry mouth while taking bupropion. People taking bupropion should use caution when

driving or operating heavy machinery until they know how the drug will affect them.

What are nicotine inhalers?

Nicotine inhalers are plastic mouthpieces with replaceable nicotine cartridges. These are different from the nicotine cartridges found in electronic cigarettes (“vaping” products). The content in nicotine inhalers is neither heated nor burned. A minimum of 6 cartridges per day is recommended when you first try to stop using tobacco. You can use up to 16 cartridges per day. When inhaling through the device, nicotine vapor (not smoke) is released. Continuous puffing for 20 minutes gives the best effect. Breathing in a big dose all at once can cause throat irritation, cough, and wheeze. Other side effects can include headache, runny nose, hiccups, and indigestion. Do not start using this product until you have stopped using other tobacco products. To prevent nicotine toxicity, other tobacco products should be avoided when using nicotine inhalers.

What is nicotine nasal spray?

Nicotine nasal spray is a liquid you spray in your nose. You can use 1 dose (1 spray in each nostril) every hour. 40 doses (40 sprays in each nostril) per day is the maximum you can use. Side effects can include nasal or throat irritation, sneezing, cough, and headache. To avoid nasal irritation, do not inhale the spray deeply into your nose.

Which tobacco cessation medications are the right ones for you?

Talk to your healthcare provider, who can help you decide which products are best for you. Combining two types of nicotine replacement therapy products, one that provides continuous dosing (nicotine patch), and the other that allows for “as needed” dosing in response to acute cravings (nasal spray, inhaler, gum, or lozenge) is more effective in helping people stop using tobacco than either alone.

Combining nicotine replacement therapy together with varenicline or bupropion can make you more comfortable and more successful in stopping tobacco use. For more information about over-the-counter nicotine replacement therapy products, see the ATS Patient Information Series fact sheet at www.thoracic.org/patients.

What are the side effects of too much nicotine?

Fear of overdose and concerns about the addictive potential and safety of nicotine replacement therapy is common. In reality, nicotine replacement therapy is a safe alternative to smoking, and addiction to nicotine replacement therapy is rare. However, some people may experience side effects from nicotine replacement therapy, including nausea, vomiting, diarrhea, and headache. People who experience side effects from nicotine replacement therapy should speak to their healthcare provider to consider decreasing the dose or frequency of use of the product or switch to a different product.

You should seek medical help if any of the following develop as they may be a sign of an overdose of nicotine: nausea, vomiting,

agitation, rapid breathing, fast or irregular heartbeat, or an increase in your blood pressure. Though rare, allergic reactions to nicotine can occur and can cause hives, difficulty breathing, or swelling of the face, lips, tongue, or throat.

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Reviewer: Marianna Sockrider MD, DrPH; Michelle Eakin, PhD

Rx Action Steps

If you are having trouble stopping tobacco products “cold turkey,” speak with your healthcare provider about other ways to help you become successful.

- ✓ Prescription medications may help you to stop using tobacco.
- ✓ Quit attempts will be more likely to succeed with the support of a tobacco cessation program.
- ✓ Seek medical help immediately if you experience an allergic reaction or have signs of toxic nicotine levels.
- ✓ Don't get discouraged with any setbacks in your attempts to stop. Most people try several times before being successful.

Healthcare Provider's Contact Number:

Additional Resources

U.S. National Library of Medicine

U.S. Food and Drug Administration. FDA 101: Smoking Cessation Products. FDA (Food and Drug Administration) Consumer Health Information.

- <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm198176.htm>

Smokefree.gov

- <https://smokefree.gov>

CDC's Office on Smoking and Health

- <https://www.cdc.gov/tobacco/index.htm>

American Cancer Society

Prescription Drugs to Help You Quit Tobacco

- <https://www.cancer.org/healthy/stay-away-from-tobacco/guide-quit-smoking/prescription-drugs-to-help-you-quit-smoking.html>

Nicotine Poisoning

- Accessed October 25, 2019. <http://www.nlm.nih.gov/medlineplus/ency/article/002510.htm>

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Using Over the Counter Nicotine Replacement to Help You Stop Tobacco Use

Congratulations! Making the decision to stop using tobacco is the most important thing you can do to improve and protect your health, as well as the health of those around you. Trying to quit on your own, sometimes called “cold turkey”, may be difficult and uncomfortable. Quitting is easier if you have the help and support you need, including medications to decrease your cravings and help reduce withdrawal symptoms.



Nicotine Replacement Helps You Quit.

Nicotine replacement therapy (NRT) provides you with some of the nicotine you would normally receive if you used tobacco and more than doubles your chances of success. Most NRT is available “over the counter” or “OTC” without a prescription. For information about medications that require a prescription [nicotine inhalers and nasal spray, bupropion (also known as Wellbutrin® or Zyban®) and varenicline (also known as Chantix®)], see the ATS Patient Information Series Fact sheet at www.thoracic.org/patients or ask your healthcare provider.

OTC nicotine replacement products include:

- nicotine patches
- nicotine gum
- nicotine lozenges

These medicines can—and in most cases should—be **combined** to best control your symptoms. You should plan to use these products for at least 8-12 weeks or as long as you need them, slowly decreasing the amount of nicotine you receive. For more about nicotine dependence and cravings, see ATS Patient Information Series fact sheets at www.thoracic.org/patients.

How can I get started?

Make a plan: Think about who can support you and help you make a plan. It could be family, friends, healthcare providers, or other people in your support network. You can also call your state quit line, tell them of your decision to quit, and ask for help with your plan.

Decide on a Dose: The more you smoke, the more nicotine replacement you will need to control your cravings. Your healthcare provider or pharmacist can help you decide what dose is right for you. If you smoke more than 10 cigarettes/day or smoke soon after waking, combining a patch with either gum or lozenges will give you the greatest chance in successfully stopping.

Learn how to beat cravings: Get ready to use NRT to control the urge to smoke. Whatever medication or combination you choose, make sure you use it as directed. Carry your lozenges and gum with you for immediate cravings and change your patch every day. Combining medications with counseling, such as a quit line, will maximize your likelihood of success.

Key Facts about Nicotine Replacement

- FDA approved for use in people 18 years of age and older.
- If you are pregnant or breastfeeding, check with your healthcare provider before using these products.
- Plan to cut back on using tobacco products while using NRT. Using tobacco products while using NRT may give you very high doses of nicotine, which may make you nervous or cause abnormal dreams, difficulty sleeping, headache, heartburn, nausea, dry mouth, or joint and muscle pain.
- Be sure to keep all nicotine replacement products out of the reach of children.

Serious side effects are rare. You should seek medical help if any of the following symptoms develop, as they may be a sign of an allergic reaction or high nicotine levels:

- hives,
- breathing difficulty,
- chest tightness,
- fast or irregular heartbeat,
- increase in your blood pressure,
- jaw, teeth or mouth problems
- severe diarrhea.

Will the nicotine in these medications cause cancer?

It is important to know that nicotine alone does not cause cancer. There are more than 7,000 chemicals you are exposed to while smoking tobacco, and some are known to cause cancer. Nicotine addiction is a major reason people continue to use

tobacco products, exposing themselves to these cancer causing chemicals. Using nicotine replacement products will help you slowly wean off nicotine, while avoiding the risks of inhaling burning tobacco.

Which nicotine replacement product is right for me?

Talk to your healthcare provider about which products are best for you. Many people do not use enough nicotine replacement products to control their cravings. Combining nicotine replacement products (such as using the patch and the gum at the same time) is safe, can make you more comfortable, and more successful in stopping tobacco for good. Many times, these medications are covered by insurance plans, including Medicaid. Ask your healthcare provider or insurance company to help reduce the cost of OTC medications.

Below are more details on each of these products:

Nicotine Patch

The nicotine patch is a skin patch applied in the morning and worn all day. It should be applied anywhere on the body above the waist, preferably on an area with little or no hair. Rotate the sites where you apply the patch to avoid skin irritation. Nicotine patch is most effective when worn continuously for 24 hours. If you have difficulty sleeping while using the nicotine patch, you can try taking the patch off one hour before bedtime to help reduce nightmares and poor sleep.

If the patch falls off, you must reapply a new one. Do not cut patches in half. The patch delivers nicotine continuously through the skin. Cutting the patch will change the amount of nicotine you get. The nicotine patch is available in 7, 14 and 21 mg doses. People often start with a higher dose patch and then gradually work down to lower doses. Consult your healthcare provider about the best dose for you.

Nicotine Gum

Nicotine gum is nicotine available in a chewing gum and works best to control cravings throughout the day. You do not chew it like candy or bubble gum. The proper use of nicotine gum is to chew it a little and “park it” between your cheek and gum. This allows the nicotine to be absorbed through your cheek and gums. Do not continually chew the gum and swallow the juice. Swallowing too much juice can cause hiccups, nausea and abdominal pain. Also do not keep the gum in your mouth overnight, because you could choke, and it loses its potency after 30 minutes to an hour. The gum is available in 2mg and 4mg doses and can be used along with the patch to treat cravings. A tobacco counselor or your healthcare provider can recommend the best dose for you.

Nicotine lozenge

This nicotine replacement comes in the form of a dissolving lozenge and is also used to control cravings throughout the day. Moisten the nicotine lozenge and park it between your cheek and gum. Do not chew the lozenge. Lozenges lose their potency after 30 minutes to an hour. The lozenge is available in 2mg and 4mg doses and can be used along with the patch to treat cravings. A tobacco counselor or your healthcare provider can recommend the best dose for you.

Can I use electronic cigarettes to help me stop smoking?

The current evidence does not support the use of electronic cigarettes (or vaping) to assist with smoking cessation. While some studies suggest that these products may help with quitting smoking, many other studies show that they are ineffective at doing so. Electronic cigarettes are not FDA approved for helping with quitting smoking, whereas OTC nicotine replacement and prescription medications (nicotine inhalers and nasal spray, bupropion [also known as Wellbutrin® or Zyban®] and varenicline [also known as Chantix®]) are proven to be effective and safe.

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Rx Action Steps

- ✓ Speak with your healthcare provider or call your local QuitLine to understand what products and dosage are right for you.
- ✓ Make a plan on how you are going to cut out your tobacco use as you start nicotine replacement therapy and ask a friend or family member to help support you in this effort.
- ✓ Remember, becoming free from tobacco products is your most important goal.
- ✓ Don't give up! Most people take several tries to quit for good.

Healthcare Provider's Contact Number:

Resources

American Thoracic Society

- www.thoracic.org/patients

smokefree.gov

- <https://smokefree.gov/tools-tips/how-to-quit/using-nicotine-replacement-therapy>

US FDA

- <https://www.fda.gov/consumers/consumer-updates/want-quit-smoking-fda-approved-products-can-help>

Centers for Disease Control (CDC) – includes tips from former smokers

- <https://www.cdc.gov/tobacco/campaign/tips/quit-smoking/guide/explore-medications.html>

American Cancer Society

- <https://www.cancer.org/healthy/stay-away-from-tobacco/guide-quit-smoking/nicotine-replacement-therapy.html>

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