

# 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](http://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](http://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.

**Authors:** Krishna Reddy, MD, SM; Sucharita Kher, MD; Hasmeena Kathuria, MD; and the Tobacco Action Committee of the American Thoracic Society.

**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>

This information is a public service of the American Thoracic Society. The content is for educational purposes only. It should not be used as a substitute for the medical advice of one's healthcare provider.

