National Comprehensive Cancer Network®

2026

NCCN Guidelines for Patients®

Cancer care recommendations from leading experts at the National Comprehensive Cancer Network® (NCCN®)

Quitting Smoking



Made possible by

National Comprehensive Cancer Network® Foundation

Available online at NCCN.org/patientguidelines



NCCN Guidelines for Patients®

The essential guide for people facing cancer.

Based on care recommendations from leading cancer experts.

Explains high-quality cancer care provided at state-of-the-art cancer centers.

Reviewed and revised every year.

Did you know that top cancer centers across the United States work together to improve cancer care? This alliance of leading cancer centers is called the National Comprehensive Cancer Network® (NCCN®).

Because cancer care is always evolving, NCCN develops and frequently updates evidence-based cancer care recommendations used by health care providers worldwide. These recommendations are known as the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®).

The NCCN Guidelines for Patients plainly explain these expert recommendations, so you can talk with your care team about the best care for you.

These NCCN Guidelines for Patients are based on the NCCN Guidelines® for Smoking Cessation, Version 2.2026 — August 24, 2026.

View the NCCN Guidelines for Patients free online: NCCN.org/patientguidelines

Find an NCCN Cancer Center near you: NCCN.org/cancercenters

Learn how the NCCN Guidelines for Patients are developed: NCCN.org/patient-guidelines-process

Connect with us

@NCCNorg @NCCNVideo NCCN @NCCNorg

Supporters

National Comprehensive Cancer Network® Foundation

We translate complex cancer care into trusted guidance and fund the next generation of researchers shaping tomorrow's care.

NCCN Guidelines for Patients are supported by funding from the NCCN Foundation.

NCCN independently adapts, updates, and hosts the NCCN Guidelines for Patients. Our corporate supporters do not participate in the development of the NCCN Guidelines for Patients and are not responsible for the content and recommendations contained therein.



The way forward starts here.

National Comprehensive Cancer Network® Foundation

Give Now

Contents

4 Chapter 1
About smoking

9 Chapter 2
The benefits of quitting

14 Chapter 3
Treatment options

20 Chapter 4
How to quit

29 Chapter 5
Trouble with staying quit

34 Chapter 6
Other resources

38 Words to know

40 NCCN Contributors

41 NCCN Cancer Centers

42 Index

©2026 National Comprehensive Cancer Network, Inc. All rights reserved.

NCCN Guidelines for Patients and illustrations herein may not be reproduced in any form for any purpose without the express written permission of NCCN. No one, including doctors or patients, may use the NCCN Guidelines for Patients for any commercial purpose and may not claim, represent, or imply that the NCCN Guidelines for Patients that have been modified in any manner are derived from, based on, related to, or arise out of the NCCN Guidelines for Patients. The NCCN Guidelines are a work in progress that may be redefined as often as new significant data become available. NCCN makes no warranties of any kind whatsoever regarding its content, use, or application and disclaims any responsibility for its application or use in any way.

NCCN Foundation seeks to support the millions of patients and their families affected by a cancer diagnosis by funding and distributing NCCN Guidelines for Patients. NCCN Foundation is also committed to advancing cancer treatment by funding the nation's promising doctors at the center of innovation in cancer research. For more details and the full library of patient and caregiver resources, visit NCCN.org/patients.

National Comprehensive Cancer Network (NCCN) and NCCN Foundation
3025 Chemical Road, Suite 100, Plymouth Meeting, PA 19462 USA

1
About smoking

6 Why should I quit smoking?

7 Why is it hard to quit smoking?

7 How can I quit smoking?

8 How can I get the best care?

By reading this guide, you're flipping the page to your next chapter—the one where you take a solid step forward to finally being done with smoking and getting healthier. Good for you!

This guide will show you how to quit smoking with recommendations backed by research and experts. If you have cancer or a history of cancer, quitting smoking now is best. Whether you're still smoking or you've recently quit, the advice in this guide applies to you. In fact, within the first month of quitting, you're at high risk of returning to smoking, and the strategies in this guide can help you now.

Learning how smoking or using tobacco products affects your body will help you understand the quitting recommendations in this guide better. So read on for more information.

While the advice in this guide will help you quit smoking and the term smoking is used throughout, it applies to quitting all tobacco products and non-tobacco (nicotine) products (like electronic cigarettes/vaping and oral nicotine pouches).

Quitting isn't easy but it is possible. Some people try a dozen or more times before they quit smoking for good.



Why should I quit smoking?

No matter how much you've smoked or how many times you've tried to quit in the past, quitting now can help you live longer and reduce the chance of future new cancers.

Effects on cancer treatments

If you have cancer or you're a survivor, smoking carries additional health risks. For one, it interferes with your body's response to cancer medicine. That means your treatments, like systemic therapies (chemotherapy, targeted therapies, and immunotherapies) and radiation therapy, might not work as well. And you also might have more side effects (known as toxicity) from these treatments, such as fatigue, nausea, and infections.

Effects on surgery

Smoking can increase the risk of problems from surgery, and it delays the healing process. For example, you may end up staying in the hospital longer.

Smoking can also decrease your quality of life after surgery. This means you might have more fatigue, more pain, or more shortness of breath (called dyspnea) than someone with cancer who doesn't smoke.

What's more, smoking tends to weaken the immune system and makes you more prone to infections after surgery. It can restrict blood flow and slow tissue repair. The chemicals in cigarettes make the blood stickier, which can increase the risk of blood clots and contribute to other heart and lung issues. Quitting smoking prior to your surgery helps no matter how long or how much smoking you've done in the past. For more information, see *Chapter 2: The benefits of quitting.*

Quitting is tough, but so are you!



Also, consider this: It might sound surprising when you're dealing with a cancer diagnosis, but some people with cancer feel like quitting smoking can lessen their stress. And it could be a helpful distraction—the perfect time to quit.

Why is it hard to quit smoking?

Smoking is not just a habit—it's an addiction. Most people start smoking when they're young and may not think about addiction and health effects. Behind that addiction is nicotine, a highly addictive chemical compound. Nicotine exists in nearly all tobacco products, including cigarettes, cigars, hookah tobacco, and smokeless tobacco. Nicotine is also in most electronic cigarettes (e-cigarettes) and nicotine pouches. These products are designed to deliver nicotine to your brain quickly.

As nicotine stimulates parts of your brain over and over, your brain gets used to having it. In time, your brain changes in response to nicotine. It craves nicotine just to feel normal. So, you grab that cigarette.

When you start the quit process, your brain and body get confused. You may feel anxious when you don't get nicotine. It might be hard to concentrate or to sleep. And you will crave cigarettes. This process is known as withdrawal—more on that in *Chapter 2: The benefits of quitting.*

How can I quit smoking?

Quitting all tobacco products should be part of your cancer treatment plan. Your health care professional should work with you to come up with a personalized quit plan. Follow the quit plan, just like you would follow a doctor's instructions to take a medication. If you're not ready to quit, then plan to reduce how much you smoke with the goal of quitting soon.

Most of the time, because of nicotine's addictive nature, quitting smoking requires more than one attempt, strategy, or product. For example, maybe you can quit by just using the nicotine patch or gum. But it might not be long-lasting in helping you "stay quit" because the patch or gum is less effective unless you also use the behavioral strategies described in this guide. For all the NCCN expert recommendations, see *Chapter 3: Treatment options* and *Chapter 4: How to quit*.

If you feel like you can't quit (called sustained smoking) or have trouble staying quit (called slips and return to smoking), there are other options to help you remain smoke-free. Slips can happen and are not signs that you won't be able to quit for good. For more information, see *Chapter 5: Trouble with staying quit*.

How can I get the best care?

Advocate for yourself. You have an important role to play in your care. Many people feel more satisfied when they actively take part in planning their cancer care.

The NCCN Guidelines for Patients will help you play a larger role in your care. Discuss the recommendations in this guide with your care team. Ask questions about your options and share your goals and concerns.

Don't know what to ask? You're not alone. That's why we include suggested questions to ask at the end of chapters.

Keep reading to find the best care for you.

How this guide can help you

Making decisions about cancer care is stressful. There's a lot to learn, and you don't know what the future holds.

Use this guide to get the information and support you need.

Patients, doctors, and other health care professionals trust the NCCN Guidelines for Patients. This guide uses clear, everyday language to explain current cancer care recommendations made by respected experts in the field. Their recommendations are based on the latest research and practices at leading cancer centers.

Your health is unique to you, so your cancer care should be, too. As you read this guide, you'll learn which treatments are likely to provide the best results for you. And you'll be better prepared to talk with your care team.

2
The benefits of quitting

10 Overall health benefits

11 Specific cancer benefits

12 Recognizing withdrawal

13 Key points

13 Questions to ask

There are so many health benefits to quitting smoking. But did you know it can really help with cancer and its treatment?

Overall health benefits

Once you stop smoking, you can see some benefits almost right away. For instance, about 12 hours after you quit smoking, the carbon monoxide level in your blood drops to normal. This toxic gas comes from tobacco smoke and is harmful in the blood because it crowds out oxygen, which your heart, brain, and other vital organs need to work properly.

Between 1 and 12 months, coughing and shortness of breath will decrease. And the longer you go without smoking, the more health benefits you'll experience.

Other ways you'll start to feel better:

- Your senses of taste and smell will improve
- You'll have more energy
- Being active will be easier because your lungs will get stronger

Health benefits of quitting



Breathe easier | **Taste more** | **Smell your surroundings better** | **Have more energy** | **Be more active**

Specific cancer benefits

Related to your cancer, quitting smoking and staying quit is linked to:

- Better cancer survival rates
- Improved cancer treatment results
- Enhanced health-related quality of life
- Decreased treatment-related toxicity
- Fewer drug side effects and surgical complications

When it comes to surgery benefits, research has shown that people with cancer who smoke and stop before surgery are significantly more likely to survive. Studies have also proven that people who recently quit smoking after being diagnosed with cancer have better survival than those who continue to smoke. That's really good news!

Everyone, no matter their age or stage of cancer, can benefit from quitting smoking.

Aside from all the health benefits of quitting, think about all that money you'll save from not buying cigarettes or e-cigarettes!

> **"I truly believe that you have to go through something life changing to gain something life affirming."**

It's never too late to quit.



Recognizing withdrawal

When you discuss the advantages of quitting, it's not fair to do so without mentioning nicotine withdrawal. While withdrawal can be uncomfortable, it's not dangerous. Experiencing withdrawal is one reason why some people don't successfully quit. But the medications and strategies discussed in this guide will get you through it. See *Chapter 3: Treatment options*.

Withdrawal happens because you stop using products with nicotine. When the chemical compound is no longer there, your brain and body have to get used to not having it. So, the brain craves nicotine and can make you feel overall unwell at first. It's normal to feel that way coming off nicotine. It takes time to get over withdrawal. But you can do it.

Aside from the cravings, you might have trouble concentrating or falling asleep. Some other common withdrawal symptoms include:

- Irritability
- Restlessness
- Hunger
- Anxiety, sadness, or depression

Physical withdrawal symptoms tend to go away within a few days, but many may still be there 2 to 4 weeks after quitting. The cravings, increased appetite, and mood changes could continue for weeks to months. It's important to know that nicotine withdrawal cannot hurt you, and over time, it will get easier. The good news is it will get better with each day as your brain readjusts to not having nicotine.

You've got this!



Some people want to quit suddenly without help—known as going cold turkey—but withdrawal can be harder this way. And if you smoke a half a pack or more a day, you're less likely to quit for good without assistance. In the next chapter, you'll learn your options so you can quit for good.

Key points

- It's never too late to quit smoking.
- Your health will start to improve from quitting smoking almost immediately.
- The longer you can stay quit, the more your health will improve.
- It's easier to be active after you quit.
- Quitting smoking makes you more likely to have better cancer survival and treatment outcomes.
- Withdrawal happens because the brain is craving nicotine and takes time to adjust.
- Withdrawal can be easier if you get help.

Questions to ask

- I've quit before and the withdrawal was too much for me. How will it be different this time?
- I'd like to connect with others and build a support system to help me quit. Can you tell me how to do that?
- I'd rather just stop smoking cold turkey than take medicines. Can you tell me why that might or might not work for me?
- What's your opinion about using e-cigarettes to help me quit?
- Should I tell my family and friends I'm quitting ahead of time, or will that make it harder on me?

What's next

Now that you've learned all the benefits of quitting smoking, you might wonder how to make it happen. Keep reading for treatment options in the next chapter and how to quit in Chapter 4.

3
Treatment options

15 Behavioral treatment

16 Nicotine replacement therapy

18 Prescription medicines

19 Key points

19 Questions to ask

The most effective way to quit is with help from a health care professional using a combination of behavioral counseling and medications (over-the-counter and prescription). This chapter explains how each treatment works.

As mentioned in the previous chapter, withdrawal can be challenging. But you can talk to and get help from your health care professional who might recommend the following products and strategies to make it a little easier.

Behavioral treatment

Behavioral treatment can be very powerful in helping you quit. This is counseling from a health care professional, especially someone with specific training in quitting smoking (smoking or tobacco cessation) counseling. It's a layer of support to move you toward your goal of quitting.

With behavioral counseling, you'll learn how to:

- Cope with nicotine withdrawal symptoms and cravings
- Recognize your triggers (like coffee, alcohol, social situations, or stress)
- Deal with stressful situations when you're more likely to smoke
- Handle the times where you might be tempted to smoke (like break time at work or getting together with other people who smoke)
- Address other roadblocks to quitting and what might help
- Manage barriers like pain, maintaining personal control, secondhand smoke, guilt over smoking, fear of stigmatization, and how you think of your cancer

But even brief counseling can help. This shorter counseling (even a few minutes) can be done in person with your health care professional, through telephone quit lines, and/or on video visits. You can also take advantage

Who can help you

This book uses the term **health care professional** to describe the person who can provide or prescribe behavioral treatment (counseling) or medicine to help you quit smoking.

Fortunately, there are many types of health care professionals who can help you quit. This may be your primary care doctor, your oncologist, your pulmonologist, a mental health professional, a tobacco treatment specialist, or a quitting counselor.

You may even meet with several people who can help you with different aspects of quitting.

You are not alone!

of free app and web-based quit smoking programs (see *Chapter 6: Other resources* for more information).

Contingency management

Sometimes behavioral treatment and medicines may not be enough to help you stay smoke-free. But a type of behavioral treatment called contingency management is an additional step that might be what you need.

Contingency management is a type of positive reinforcement to help you stay engaged in quitting by using incentives. It holds you accountable by using an outside measurement to ensure you're still free from smoking. This measurement could be breath testing for carbon monoxide (the toxic gas that can be in your lungs and bloodstream) or saliva or urine testing called cotinine testing (cotinine is a biomarker for nicotine and tobacco use).

Once it's confirmed you've been smoke-free, you could get rewards in the form of gift cards or deposits on a smart debit card.

These programs can be available through the following:

- Smartphone apps like DynamiCare Health and Mōtiv8
- Employer-sponsored wellness programs in the form of health insurance discounts and wellness vouchers
- Clinical trials offered at hospitals and universities. You can check them out on the federal clinical trials registry, ClinicalTrials.gov.

No matter the type of behavioral treatment, it's best to start and set a quit date as soon as possible. Read *Chapter 4: How to quit* for more information on working with your health care professional on your quit plan.

Most of the time, you'll need a combination of behavioral treatment with over-the-counter medicines and/or prescription medicines described in the next sections.

The good news is most health insurance plans cover FDA-approved, quit-smoking prescription medicines, including over-the-counter medicines.

Nicotine replacement therapy

Nicotine replacement therapy (NRT) is designed to help ease withdrawal symptoms. NRT works by replacing some of the nicotine you'd get from cigarettes, so you don't feel as uncomfortable quitting. The nicotine in NRT has proven to be safe and effective to

Using nicotine replacement therapy (NRT) like the nicotine patch can be very effective at helping you quit smoking.



help you quit—meaning, it doesn't contain the thousands of chemicals in cigarette smoke.

The way it works: You slowly reduce the NRT to decrease the amount of nicotine you take in.

NRT comes in many forms, like skin patches, oral lozenges, nasal spray, and gum. They can be combined for better and faster quit rates, but you need to check with your health care provider on how to do that. See **Guide 1** for a description of aids to quit smoking.

Most NRT can be purchased over-the-counter without a prescription. But many insurance companies cover over-the-counter NRT if you have a prescription from your health care professional. That means that with a prescription and insurance, there's often little to no out-of-pocket costs for you.

Side effects

You might have side effects with NRT, but they're usually mild, such as skin rash with the patch or upset stomach with the gum or lozenge. You don't usually need to stop a medicine because of a minor side effect. Talk to your health care professional if side effects are more severe for you.

When you use NRT, you may see the box instructions decreasing the dose over time to stopping NRT completely. But NCCN experts recommend that people with cancer who start NRT remain on it for a long period of time without decreasing doses. See *Chapter 4: How to quit* for details. In some cases, people might use NRT for the entire duration of cancer treatment or longer.

Guide 1
Types of quit-smoking aids

Over-the-counter nicotine replacement therapies (NRTs)	• Skin patches (also called transdermal nicotine patches): These patches stick to your skin much like adhesive bandages. They are considered long-acting NRTs. • Gum (also called nicotine gum): You have to follow the directions for this type of gum to be effective. It's not chewed like regular gum. • Lozenges (also called nicotine lozenges): These look like hard candy and dissolve in your mouth.
Nicotine prescription medicine	• Nicotine spray: This is a handheld spray bottle that you spray in each nostril.
Non-nicotine prescription medicines	Two FDA-approved quit-smoking products that are in pill form and do not contain nicotine: • Varenicline • Bupropion

Prescription medicines

In addition to NRT, there are two FDA-approved medicines to help you quit. These medicines are available by prescription through a health care professional and don't contain nicotine:

- Varenicline (formerly known as Chantix)
- Bupropion (known as Wellbutrin or Zyban)

Because these medicines don't contain nicotine, they help you stop smoking in other ways—by lessening your brain's urge to smoke.

You usually have to take the medicine for 12 weeks or longer. Like NRT, some people might stay on these medications throughout their cancer treatment or longer. Talk openly and honestly with your health care professional about any concerns, so you both can find the right medicine for you.

Varenicline

Varenicline is a pill that works by attaching to the same parts of your brain that are stimulated by nicotine. This means that nicotine from a cigarette has fewer places to attach because the varenicline is already there and reduces the urge to smoke. For varenicline to work properly, you have to start it a week before you quit. It can be combined with NRTs but must be done under a health care professional's supervision.

Side effects

Varenicline can have side effects. Some of the most common are nausea or vomiting, constipation and gassiness, and strange dreams and sleep disturbances. Talk with your health care professional about side effects because there can be ways around them. For example, taking the medicine with food, making dietary changes, or avoiding taking the medicine before bed may ease those side effects. Changes in mood or behavior can also be side effects, but they're rare.

Remember to talk to your health care professional right away if you have side effects.

Bupropion

Bupropion may be a good choice for people who've tried using other quit-smoking medicines but haven't been able to quit successfully. Bupropion is a pill you take twice a day. Start taking it 1 to 2 weeks before quitting. It can be combined with NRTs, but this must be discussed with your health care professional first.

Side effects

Like varenicline, bupropion can have side effects. Some of the most common are nausea or dizziness, trouble sleeping, constipation, dry mouth, and rash (stop taking it if you develop a rash).

Talk to your health care professional about any side effects. There are ways to deal with them, like taking bupropion with food to combat nausea, taking it in the late afternoon to combat sleep issues, and drinking plenty of water to help with constipation and dry mouth.

Don't hesitate to ask questions about potential side effects.

For more information on working with your health care professional and any of these quit strategies, see *Chapter 4: How to quit*.

Key points

- Behavioral treatment can include counseling or even free web-based programs, quit lines, or apps.
- Behavioral treatment combined with prescription medicines and/or nicotine replacement therapies (NRTs) can make quitting easier.
- Most NRTs can be bought without a prescription. But with a prescription, the cost is often covered by insurance.
- NRTs can have side effects, but they're usually mild and not dangerous.
- Prescription medicines are equally effective as NRT in helping you quit.
- While prescription medicines can help you quit, talk to your health professional about any side effects—many can be managed.

Questions to ask

- Do I have a choice of when to begin treatment?
- How can I tell which treatment is causing the side effects?
- How long will treatment last?
- Will my insurance cover the treatment you're recommending?
- Are there any programs to help me pay for treatment?

What's next

In this chapter, you've learned what recommended and approved treatments are available. Read the next chapter to find out how you can work with your health care professional to have better success in quitting smoking.

4
How to quit

21 Your quit plan

22 Ready to quit?

24 Recommended ways to quit

25 Alternative ways to quit

28 Key points

28 Questions to ask

Quitting isn't easy, and you may have tried it before. But now is the time to quit for good. This chapter explains what to expect while working with your health care professional in coming up with a quit plan.

Experts recommend that you quit smoking as soon as possible. What's more, a plan for quitting smoking should be part of your cancer treatment. If you've finished cancer treatment, quitting smoking now can benefit your health in many ways (see *Chapter 2: The benefits of quitting*).

Working with your health care professional can help smooth your path to quitting success. You'll have their support, which helps you stay motivated. And you'll work together to come up with a specific quit plan just for you. Still, if you're not ready to quit, you can plan to reduce your tobacco use with the goal of quitting later.

Your quit plan

To help create your quit plan, your health care professional will ask you several questions. One of the first things they'll ask about is your tobacco and nicotine use. For example, how much and how long you've been smoking or using other products, like pipes, cigars, hookah, cigarillos, e-cigarettes, smokeless tobacco, and nicotine pouches. See sample questions in **Guide 2**. For more information on e-cigarettes and nicotine pouches, see "Alternative ways to quit."

They'll ask about your previous quit attempts and what you've used to help quit in the past. They'll also recommend that your family members stop smoking because of the added health concerns of secondhand smoke. Not having other people who use tobacco in the house will make it easier for you to quit and to stay quit, too. If you're not sure how to convince them or how to handle it, ask your health care professional for help and resources.

"Ask for help: Use the websites, support groups, or any understanding people."



Ready to quit?

If you feel ready to quit, your health care professional will encourage you to set a quit date within 30 days. When you're talking with them, they'll explain your options for treatment (mentioned in *Chapter 3: Treatment options*) and discuss the dangers of continued smoking on your cancer treatment.

If surgery is planned as part of your cancer treatment, and it's urgent, they'll tell you that it's important to quit almost immediately with the help of behavioral counseling and medicines.

If you've quit but have smoked within the past 30 days (this is the period when slips and return to smoking are most likely), your health care professional will discuss the

Guide 2
Questions you might be asked

Your health care professional may ask you questions like these to help you come up with a plan to quit.

About your tobacco use	• How much do you currently smoke or use tobacco or nicotine-containing products (cigarettes, pipes, cigars, hookah, cigarillos, e-cigarettes/vaping, smokeless tobacco, nicotine pouches) per day? • What is the typical amount? • How soon after you wake up in the morning do you smoke or use tobacco or nicotine-containing products?
About your previous quit attempts	• What is the longest period you have gone without smoking or using nicotine-containing products? • Which strategies were helpful? • Which strategies were the least helpful and why? (side effects, cost, continued cravings, not enough behavioral support) • When was your last quit attempt?
What you used to help you quit in the past	• No help? • Medicines (varenicline, bupropion, NRT)? • Support group? • Behavioral treatment? • Quit lines, websites, smart phone apps, or other media? • E-cigarettes? • Nicotine pouches? • Other?
About tobacco use of others at home	• If they smoke, how are you exposed? • How often?

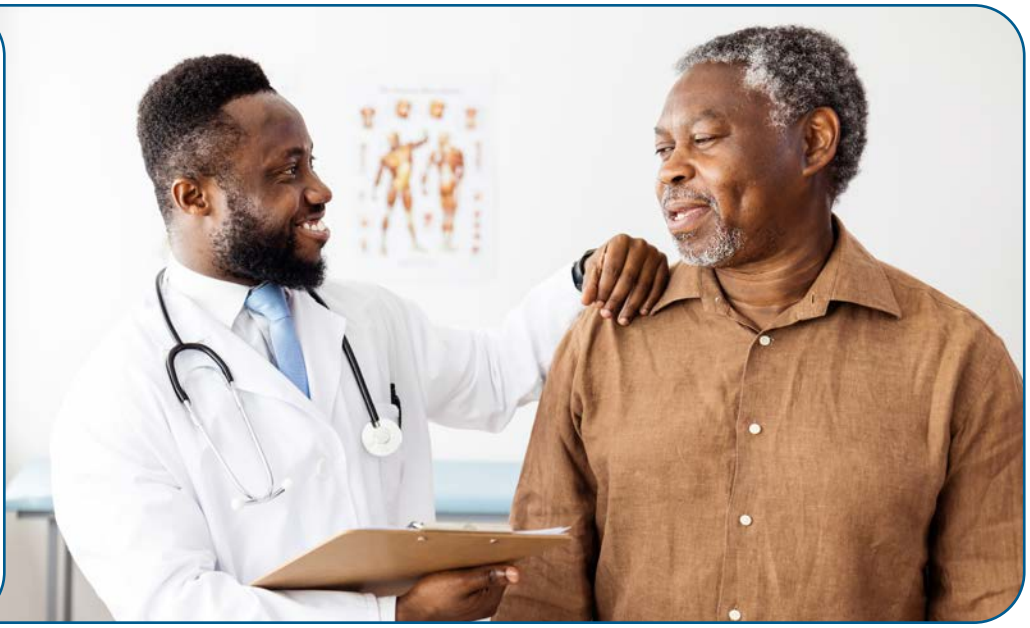
risk of return to smoking. They may provide counseling and resources and encouragement to stay quit. And you'll likely be encouraged to continue behavioral treatment and quit-smoking medicines (explained ahead).

If you've quit and it's been between 30 days to 1 year since you last smoked, you'll also be assessed for risk factors for return to smoking. Your health care professional may encourage behavioral treatment and nicotine replacement therapies (NRTs) and/or prescription medicines (explained ahead). For more information, see *Chapter 5: Trouble staying quit*. Also, if quitting has caused stress and you need more help with your mental health or substance use, see *NCCN Guidelines for Patients: Distress During Cancer Care,* available at NCCN.org/patientguidelines and on the NCCN Patient Guides for Cancer app.

If you're still not ready to quit, your health care professional might want to find out what's keeping you from quitting. They should develop a plan with you to reduce your tobacco use through behavioral therapy and either NRT or prescription oral medications (explained ahead). Then, they'll encourage you to set a quit date for the near future, likely in 1 to 3 months.

Just be aware that smoking less is not as helpful as quitting smoking completely because you're still exposed to tobacco and its chemicals. Still, any bit less can help. At each visit, your health care professional will likely encourage you to quit to help you have better cancer treatment results.

Working closely with your health care professional can give you the support you might need in becoming and staying smoke-free.



Recommended ways to quit

Quitting is more successful when it's backed up with **behavioral treatment** (counseling). Although longer, more frequent behavioral therapy sessions with trained smoking cessation counselors increase the chance for success in quitting, even a few minutes of counseling from your health care professional can help (see *Chapter 3* for more information). Other options include using apps, web-based quit smoking programs, telephone quit lines, and/or video visits (see *Chapter 6: Other resources* for more information).

In addition to whatever type of counseling you choose, your health care professional will likely recommend what's called **combination NRT** (see *Chapter 3* for more information). This is a combination of a long-acting nicotine patch plus either a short-acting nicotine gum or lozenge for 12 weeks or longer (at that time you'll check in with them to see how you're doing). See "Follow up."

Or your health care professional may recommend behavioral treatment plus **varenicline** (see *Chapter 3* for more information) for 12 weeks or longer (at that time you'll check in with them). See "Follow up."

For different treatments that might be used, see **Guide 3**.

Guide 3
Treatments for quitting smoking

Behavior therapy	• Multiple sessions of individual or group therapy with added sessions as needed. But even brief advice (a few minutes) from a health care professional can help.
Preferred medicines	• Combination NRT: long-acting NRT (nicotine patch) with short-acting NRT (lozenge/gum/nasal spray) • Varenicline
Other recommended medicine combinations	• Varenicline and short-acting NRT • Bupropion (for people with depression or fatigue) • Bupropion and NRT (for people with depression or fatigue) • Bupropion and varenicline • Varenicline and nicotine patch

When you start your quit plan, it's important to know that you may have slips and resume smoking a cigarette or more. This happens, and you shouldn't get discouraged. Continue with your plan. Think about what's triggering those slips, talk with your health care professional, and read the next chapter for extra help.

Follow-up

Within the first 3 weeks of quitting (within 1 week is preferred), your health care professional may ask you to check in to see how you're doing. Then at your 12-week check-in, they might adjust the frequency of behavioral treatment or the medicine dosage.

If you're smoke-free at that point (doing well with quitting and not needing more assistance), your health care professional might suggest continuing to take the medicine for 6 months or longer. You'll be asked to check in 6 months and 12 months after you started your quit attempt. Understand that you might need to be on your quit plan for the duration of your cancer treatment or longer.

During follow-up, you might have a slip or a return to smoking. Don't worry. Read the next chapter for help when this happens.

Remember that even if you think you can't quit after one or two (or more) attempts, it doesn't mean you can't keep trying to quit and eventually succeed. You—like so many others who use tobacco products—probably just need the right combination of recommended options (non-nicotine medicines, NRT, and behavioral treatment) to keep you smoke-free.

Alternative ways to quit

Some people turn to other ways of quitting like hypnosis, acupuncture, or nutritional supplements. While these alternatives might work for some people, your health care professional won't likely recommend them because research has not proven that they're effective.

E-cigarettes (vaping) and nicotine pouches

But some people try to stop smoking by using electronic cigarettes (e-cigarettes) or nicotine pouches. There is growing evidence that these types of non-tobacco products can help with smoking cessation. But they're not without dangers, and they're not FDA approved for quitting smoking. Plus, your health care professional won't likely recommend them.

E-cigarettes and nicotine pouches both contain nicotine and many other toxic chemicals. E-cigarettes also contain lead, flavorings linked to lung disease, small particles that can be inhaled deep into the lungs, and other cancer-causing chemicals. They can also be highly addictive. Nicotine pouches have other chemicals like heavy metals and formaldehyde.

E-cigarettes

Most e-cigarettes contain the addictive chemical compound of nicotine but not tobacco. E-cigarettes are battery-operated devices that heat a liquid and produce an aerosol. An aerosol is a mix of small particles released in the air. Some people refer to the aerosol from an e-cigarette as vapor, but it isn't water vapor.

E-cigarettes are also known as e-cigs, vapes, vape pens, and electronic nicotine delivery systems (ENDS).

If you've quit smoking by vaping, your health care professional will work with you and not recommend quitting electronic cigarettes if there is a risk of you to return to smoking.

Some people will add vaping to their cigarette smoking (called dual use) as a way to smoke fewer cigarettes per day. But this is risky, and there's evidence that this can be more dangerous than smoking alone.

If you use e-cigarettes and want to quit, it can be done by following the same methods discussed in this guide for quitting tobacco—by combining behavioral methods and medication. But NCCN experts recommend that you not return to smoking as a result of quitting e-cigarettes.

Nicotine pouches

These small, white, square or rectangular pouches are flavored and contain nicotine and other ingredients. Nicotine pouches are free of tobacco and are meant to be placed between your lip and gum to release nicotine into the bloodstream. Users don't need to spit to use them, unlike dipping or chewing tobacco.

Like e-cigarettes, nicotine pouches are not FDA approved as a quit-smoking aid. The FDA warns that they can be addictive. Basically, there isn't enough research right now to know their long-term health effects.

E-cigarettes or vapes contain nicotine but not tobacco. They still contain many harmful chemicals and are known to be addictive.



Bottom line with alternatives

It's best to quit smoking completely with the recommended treatments (mentioned at the beginning of this chapter) than to switch to vaping, nicotine pouches, or other alternatives.

Still, if you do quit smoking traditional cigarettes and e-cigarettes or nicotine pouches are helping you do that, your health care professional should support you. But they may eventually encourage you to stop using these products, too, and instead use FDA-approved methods of NRTs, behavioral treatment, and/or prescription medicines to quit them.

"There are many options to help you quit. You can do it! Be a quitter!"



Nicotine pouches are placed between your lip and gum and release nicotine into the bloodstream. They contain harmful chemicals and are known to be addictive.

Key points

- Quitting smoking is easier with support.
- Combination nicotine replacement therapy (NRT) is using a long-acting NRT (nicotine patch) with a short-acting NRT (lozenge, gum, or nasal spray).
- Quitting is more successful when behavioral treatment is combined with medications, such as combination NRT, varenicline, or bupropion.
- You might just need the right combination of recommended options to quit for good.
- Your health care professional will want to check in with you at 3 weeks and then again at 12 weeks after quitting.
- Slips happen. If they do, go back to your plan and read the next chapter for help.
- Some people switch to e-cigarettes, but they're not FDA approved as a smoking treatment. If you quit smoking this way, experts say it's better that you continue vaping if there's a risk you'll return to smoking.

Questions to ask

- What could happen if I'm not ready to quit and I need to have cancer surgery?
- Can I start medication to quit smoking even if I'm not quite ready to quit?
- How can I avoid secondhand smoke at home?
- Should my family members enter a quitting smoking program, too? What do you recommend?
- What should I do if I also smoke cannabis?

What's next

As you've learned, working with a health care professional to make a plan to quit smoking is beneficial. But what do you do if you start smoking again? Check out the next chapter (*Chapter 5: Trouble with staying quit*) to find out what to do if that happens.

5
Trouble with staying quit

30 Risk factors for slips and return to smoking

32 Treatment for return to smoking and sustained smoking

33 Key points

33 Questions to ask

In your attempt to quit, you might experience a slip or a return to smoking, which is not uncommon. Or you might just not be able to quit right now. Keep trying! It's worth it. Read on for what to do if you're having slips or just aren't ready to quit at this time.

If you tried quitting but started smoking again soon after, that's okay. It's called a slip. Slips tend to be most likely within the first 3 months of quitting. But they can happen at any time.

If you've quit for a longer period but started smoking regularly again, that's called a return to smoking (or a relapse).

Slips and return to smoking are both common. Just about everyone who has tried to quit experiences them. A slip doesn't mean you'll start smoking again. And a return to smoking doesn't mean you're back to smoking for the rest of your life. The next attempt to quit might be the one that equals success.

Even if you keep smoking (called sustained smoking) and don't feel like you can quit, you can still quit smoking for good. Try quitting soon. Working with your health care professional will help.

Each time you try to quit, think of slips and return to smoking as small and medium-sized bumps in the road of the journey to your destination: being smoke-free. Keep going!

Risk factors for slips and return to smoking

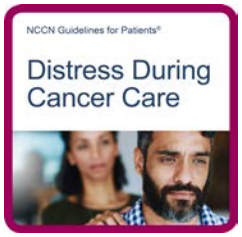
Your health care professional will likely talk with you about slips and return to smoking as well as your risk factors for them. Risk factors are what make you more likely to have a slip or return to smoking.

Two key risk factors, especially for return to smoking, are:

- You quit smoking less than a year ago (and especially less than 30 days ago)
- You start smoking within 30 minutes of waking up each day

But there are other risk factors. See **Guide 4**.

If you feel sad, anxious, or depressed or you're having trouble managing your stress, you can find help and more information in *NCCN Guidelines for Patients: Distress During Cancer Care,* available at NCCN.org/patientguidelines and on the NCCN Patient Guides for Cancer app.



Guide 4 Risk factors for return to smoking
Frequent or intense cravings
Elevated anxiety, stress, or depression
Mental health issues (current or past)
Chronic or uncontrolled pain
Living or working with someone who uses tobacco
Quitting less than 1 year ago
Recent quit attempt (starting NRT or non-nicotine medicine)
Drug (cannabis, opioids, stimulants) and alcohol use
Low confidence in your ability to quit or to stay quit
Recent history of smoking 20 or more cigarettes per day
Smoking within 30 minutes of waking up
Unstable home environment

Your health care professional will continue discussing your smoking status and risk of return to smoking at each visit.

If you have no risk factors for return to smoking, then you'll likely be encouraged at each visit to keep going with your quit attempt. Your health care professional might extend the duration of your treatment to make sure you stay smoke-free, possibly 6 months or longer.

They also might assess smoking status at the end of treatment, and again after another 6 to 12 months. Some people need to continue with their quitting smoking plan for the duration of their cancer treatment or longer.

"Never give up. Fight a good fight. Keep the faith and believe you will conquer this. You are not alone."

Treatment for return to smoking and sustained smoking

If you return to smoking after quitting or still have not quit (called sustained smoking) after the first visit with your health care professional, they will encourage you to try the first recommended treatment (see *Chapter 4*, Guide 3).

Your health care professional might also ask about side effects from the quit smoking treatments or any other obstacles in your way. At that point, you might need to try something new.

For example, if you used combination nicotine replacement therapy (NRT) only, then you might try varenicline. A different behavioral treatment might also be recommended. For more options, see *Chapter 4: How to quit.*

Checking in

After switching the therapy or making medicine adjustments, your health care professional will want you to check in within 3 weeks of treatment (1 week is preferred) and then again after 12 weeks.

If at that time you're smoke-free, then you might continue your medicine for 6 months or longer. You'll be asked to check in at the end of 6 months and again at 12 months to see how you're doing.

If you return to smoking again or are still not ready to quit, your health care professional might recommend more behavioral treatment and another medicine (NRT or prescription non-nicotine medicine). For example, if you were on combination NRT only, they may suggest adding varenicline or bupropion.

Quitting smoking can be more like a marathon than a sprint. Give yourself a break. You can—and should—try again. You and your health are worth it!

If you're having trouble staying quit, you may need to follow up with your health care professional and try another quit smoking treatment to get back on track.



Key points

- Quitting smoking slips and return to smoking are common.
- If you have a slip or return to smoking, you can still quit smoking for good.
- Quitting is possible even if you have risk factors for return to smoking.
- Even if you don't feel ready to quit today, you can be successful with help.
- Your health care professional might ask questions to find out why you're having trouble quitting.
- A new behavioral treatment might be added, or you might switch to a different nicotine replacement therapy (NRT) or prescription medicine to help you quit.
- Your health care professional will want to follow up with you within 3 weeks of treatment and again after 12 weeks.

Questions to ask

- What are my risk factors for slips and return to smoking?
- How will you and I know if a treatment is working?
- How can my loved ones help me quit smoking for good?
- Do you know of a clinical trial I can join to help me quit smoking?
- What follow-up care is needed after treatment?

What's next

Maybe you want even more information on quitting smoking. If so, be sure to read the next chapter that includes many resources to help.

6
Other resources

35 What else to know

35 What else to do

35 Where to get help

36 Questions to ask

Want to learn more? Here's how you can get additional help.

What else to know

This guide helps you know your options so you can make informed decisions and improve your cancer care. But it's not the only resource that you have.

Ask for as much information and help as you need. Many people are interested in learning more about:

- The details of their treatment to quit smoking and any side effects
- Being a part of a care team
- Getting financial help
- Finding a cancer care or a quitting smoking professional who's an expert in their field
- Coping with other health problems

What else to do

Your health care center can help you with next steps. It often has on-site resources to help meet your needs and find answers to your questions. Health care centers can also inform you of resources in your community.

In addition to help from your providers, the resources listed in the next section provide support for many people like yourself.

Where to get help

Look through the list below and visit the provided websites to learn more about these organizations.

American Lung Association
lung.org/quit-smoking/i-want-to-quit

Cancer*Care*
cancercare.org

Caring Ambassadors Program, Inc.
lungcancercap.org

Centers for Disease Control and Prevention (CDC) Office on Smoking and Health
cdc.gov/tobacco/campaign/tips/quit-smoking/

Free ME from Lung Cancer
freemefromlungcancer.org

Go2 Foundation for Lung Cancer
go2.org

Imerman Angels
imermanangels.org

LiveLung (Dusty Joy Foundation)
livelung.org

Lung Cancer Action Network (LungCAN)
lungcan.org

Lung Cancer Research Foundation
lungcancerresearchfoundation.org

Smokefree.gov
smokefree.gov

Triage Cancer
triagecancer.org

VA (Veterans Administration) How to Quit
mentalhealth.va.gov/quit-tobacco/how-to-quit.asp

I grew up smoking. Our heroes smoked. After 50 years of smoking, I quit during my cancer treatment. I quit, hoping it may help."

Questions to ask

- Who can I talk to about help with housing, food, and other basic needs?
- What assistance is available for transportation, childcare, and home care?
- Will I have to pay for treatment?
- What help is available to pay for medicines and other treatment?
- What other services are available to me and my caregivers?



Words to know

behavioral treatment
Counseling and advice designed specifically to help people quit smoking.

biomarker
Any chemical, substance, or other sign in your body that can be measured to assess your health.

combination NRT
Treatment that includes both long-acting nicotine replacement therapy (NRT) and short-acting NRT.

electronic cigarettes (e-cigarettes)
A device that has the shape of a cigarette, cigar, or pen and does not contain tobacco. They are not FDA approved to treat smoking.

nicotine
An addictive chemical found in tobacco.

nicotine replacement therapy (NRT)
Medicine that can help people quit smoking by decreasing cravings and withdrawal symptoms.

non-nicotine medicines
FDA-approved medicines (varenicline and bupropion) to help people quit smoking that require a prescription.

return to smoking
The period after quitting smoking where a person returns to smoking regularly.

slips
One or two cigarettes after a person quits smoking—a temporary setback.

sustained smoking
When a person keeps smoking and isn't ready to quit.

withdrawal
The brain and body's craving response to not having nicotine after stopping smoking.

Notes

NCCN Contributors

This patient guide is based on the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Smoking Cessation, Version 2.2026. It was adapted, reviewed, and published with help from the following people:

Dorothy A. Shead, MS
Assistant Vice President
Patient Information

Christine McLaughlin
Medical Writer

Susan Kidney
Senior Graphic Design Specialist

The NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Smoking Cessation, Version 2.2026, were developed by the following NCCN Panel Members:

*Peter G. Shields, MD/Chair
The Ohio State University Comprehensive Cancer Center - James Cancer Hospital and Solove Research Institute

Michael K. Ong, MD, PhD/Vice Chair
UCLA Jonsson Comprehensive Cancer Center

Sikandar Ansari, MD, MS
Huntsman Cancer Institute at the University of Utah

David Balis, MD
UT Southwestern Simmons Comprehensive Cancer Center

Li-Shiun Chen, MD, ScD, MPH
Siteman Cancer Center at Barnes-Jewish Hospital and WashU Medicine

Lara Coughlin PhD, MS
University of Michigan Rogel Cancer Center

James M. Davis, MD
Duke Cancer Institute

Jon Ebbert, MD
Mayo Clinic Comprehensive Cancer Center

*Donna Edmondson, MSN, AOCNP, CRNP
Fox Chase Cancer Center

*Sarah Evers-Casey, MPH
Abramson Cancer Center at the University of Pennsylvania

Panagis Galiatsatos, MD, MHS
Johns Hopkins Kimmel Cancer Center

Brian Hitsman, PhD
Robert H. Lurie Comprehensive Cancer Center of Northwestern University

Karen S. Hudmon, DrPH, MS, BS, CTTS
Indiana University Melvin and Bren Simon Comprehensive Cancer Center

Michael T. Jaklitsch, MD
Dana-Farber/Brigham and Women`s Cancer Center | Mass General Cancer Center

Thomas Klingemann, PharmD, CTTS
Fred & Pamela Buffett Cancer Center

Gina Kruse, MD, MPH, MS
University of Colorado Cancer Center

Pamela M. Ling, MD, MPH
UCSF Helen Diller Family Comprehensive Cancer Center

Richard S. Matulewicz, MD, MS, MSCI
Memorial Sloan Kettering Cancer Center

Danielle E. McCarthy, PhD
University of Wisconsin Carbone Cancer Center

*Jim Pantelas, BS
Patient Advocate

Judith J. Prochaska PhD, MPH
Stanford Cancer Institute

Jason D. Robinson, PhD
The University of Texas MD Anderson Cancer Center

A. Jossie Sandoval, MD
City of Hope National Medical Center

Christine E. Sheffer, PhD
Roswell Park Comprehensive Cancer Center

Sharon Spencer, MD
O'Neal Comprehensive Cancer Center at UAB

Marcia M. Tan, PhD, MPH
The UChicago Medicine Comprehensive Cancer Center

Tawee Tanvetyanon, MD, MPH
Moffitt Cancer Center

Hilary A. Tindle, MD, MPH
Vanderbilt-Ingram Cancer Center

Elisa K. Tong, MD, MA
UC Davis Comprehensive Cancer Center

Matthew Triplette, MD, MPH
Fred Hutchinson Cancer Center

James Urbanic, MD
UC San Diego Moores Cancer Center

Gregory Videtic, MD
Case Comprehensive Cancer Center/ University Hospitals Seidman Cancer Center and Cleveland Clinic Taussig Cancer Institute

NCCN

Susan Darlow, PhD
Senior Manager, Guidelines Information Standardization

Beth McCullough, RN, BS
Guidelines Coordinator

* Reviewed this patient guide. For disclosures, visit NCCN.org/disclosures.

NCCN Cancer Centers

For contact information, visit NCCN.org/cancercenters.

Abramson Cancer Center
at the University of Pennsylvania
Philadelphia, Pennsylvania

Case Comprehensive Cancer Center/
University Hospitals Seidman Cancer Center and
Cleveland Clinic Taussig Cancer Institute
Cleveland, Ohio

City of Hope National Medical Center
Duarte, California

Dana-Farber Cancer Institute
Boston, Massachusetts

Duke Cancer Institute
Durham, North Carolina

Fox Chase Cancer Center
Philadelphia, Pennsylvania

Fred & Pamela Buffett Cancer Center
Omaha, Nebraska

Fred Hutchinson Cancer Center
Seattle, Washington

Huntsman Cancer Institute at the University of Utah
Salt Lake City, Utah

Indiana University Melvin and Bren Simon
Comprehensive Cancer Center
Indianapolis, Indiana

Johns Hopkins Kimmel Cancer Center
Baltimore, Maryland

Mass General Brigham Cancer Institute
Boston, Massachusetts

Mayo Clinic Comprehensive Cancer Center
Phoenix/Scottsdale, Arizona
Jacksonville, Florida
Rochester, Minnesota

Memorial Sloan Kettering Cancer Center
New York, New York

Moffitt Cancer Center
Tampa, Florida

O'Neal Comprehensive Cancer Center at UAB
Birmingham, Alabama

Robert H. Lurie Comprehensive Cancer Center
of Northwestern University
Chicago, Illinois

Roswell Park Comprehensive Cancer Center
Buffalo, New York

Siteman Cancer Center at Barnes-Jewish Hospital
and WashU Medicine
St. Louis, Missouri

St. Jude Children's Research Hospital/
The University of Tennessee Health Science Center
Memphis, Tennessee

Stanford Cancer Institute
Stanford, California

The Ohio State University Comprehensive Cancer Center -
James Cancer Hospital and Solove Research Institute
Columbus, Ohio

The UChicago Medicine Comprehensive Cancer Center
Chicago, Illinois

The University of Texas MD Anderson Cancer Center
Houston, Texas

UC Davis Comprehensive Cancer Center
Sacramento, California

UC San Diego Moores Cancer Center
La Jolla, California

UCLA Jonsson Comprehensive Cancer Center
Los Angeles, California

UCSF Helen Diller Family Comprehensive Cancer Center
San Francisco, California

University of Colorado Cancer Center
Aurora, Colorado

University of Michigan Rogel Cancer Center
Ann Arbor, Michigan

University of Wisconsin Carbone Cancer Center
Madison, Wisconsin

UT Southwestern Simmons
Comprehensive Cancer Center
Dallas, Texas

Vanderbilt-Ingram Cancer Center
Nashville, Tennessee

Yale Cancer Center/Smilow Cancer Hospital
New Haven, Connecticut

Index

behavioral treatment 15–16, 19, 22–23

combination NRT 24, 28, 32

electronic cigarettes (e-cigarettes) 25–28

nicotine 5, 7, 12–13, 16–19, 21

nicotine pouches 5, 7, 21–22, 25–27

nicotine replacement therapy (NRT) 16–19, 22–25

non-nicotine (prescription) medicines 17, 25, 31–32

return to smoking 22–23, 25–26, 28, 30–33

slips 7, 22, 25, 30, 33

withdrawal 7, 12–13, 15–16



NCCN Guidelines for Patients®

Cancer care recommendations from leading experts at the
National Comprehensive Cancer Network® (NCCN®)

Quitting Smoking



The way forward starts here.

Give Now

National Comprehensive Cancer Network® Foundation

National Comprehensive Cancer Network®

3025 Chemical Road, Suite 100
Plymouth Meeting, PA 19462
215.690.0300

NCCN.org/patients – For Patients | NCCN.org – For Clinicians

PAT-N-2002-1226