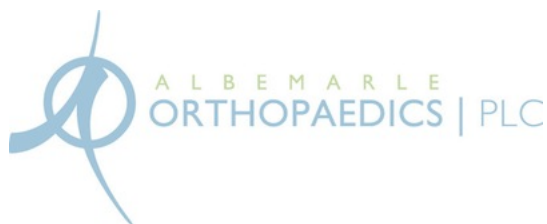


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*A Patient's Guide to*  
**Tobacco Cessation**  
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Dr. Grant is a talented orthopedic surgeon with more than 30 years of experience helping people return to their quality of life. He and GM Pugh, PA-C pride themselves in delivering personalized, convenient, honest care for their patients. They are deeply committed to continuing their surgical education, staying on top of state-of-the-art advances, adopting the latest technologies and providing affordable care at transparent prices.



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## Introduction

Congratulations! If you are reading this *Patient's Guide to Tobacco Cessation*, you have taken the first step toward helping yourself (or perhaps a loved one) forge a new path toward health and renewal.

It will come as no surprise to you that tobacco use remains the underlying cause of disease, illness, and even death for many, many people. But did you know that tobacco use is linked with twice as many deaths each year in the United States as AIDS, alcohol and other drug abuse, car accidents, fires, and suicides all combined together.

You will notice the term “tobacco cessation” rather than “smoking cessation.” That’s because many people don’t smoke, they chew tobacco. This type of tobacco is referred to as *spit tobacco*, *smokeless tobacco*, or *chewing tobacco*. And smoking doesn’t just refer to cigarette smokers but also to pipe and cigar smokers.

### This guide will help you understand

- **why you should stop smoking or using tobacco products**
- **why it is so hard to stop smoking or using tobacco products**
- **what treatment options are available**

## Why should I stop smoking (or using tobacco)?

Smoking and the use of tobacco products are associated with a number of chronic diseases, including chronic pulmonary diseases (COPD), cataracts, and cardiovascular conditions (e.g., high blood pressure, heart disease, stroke).

Tobacco use increases the risk of lung cancer and is the single most preventable cause of cancer death. Tobacco use is also linked with cancer in many other parts of the body (e.g., head, neck, throat, bladder, cervix, kidney, pancreas, stomach).

Smoking in particular harms nearly every organ of the body, damaging the smoker’s overall health even when it does not cause a specific illness. The 4000 chemical compounds in cigarette smoke make the heart beat faster and harder, narrow blood vessels, and increase blood pressure. Smokers are at an increased risk of developing diabetes, heart disease, major depression, and suicide and other problem behaviors.

For those who smoke, quitting smoking affects not only your health but also the health of those around you. The adverse effects of second-hand (passive) smoke (also known as environmental tobacco smoke or ETS) have been clearly shown in many studies.

The Surgeon General has concluded that exposure to passive smoke increases the risk of sudden infant death syndrome (SIDS), respiratory infections, ear problems, asthma, heart disease, and lung cancer in children and other family members who do not smoke but who are exposed to it on a daily basis. Exposure to second-hand smoke is also an occupational hazard in individuals working in bars, restaurants, or other places that are not smoke-free.

But the good news is that individuals who start smoking early in life (i.e., during their teen years and early 20s) but who quit before

middle-age can avoid much of the risk of tobacco-related diseases and death. And even if you quit after years of tobacco use, there are many benefits for you and for those who share the air that you breathe.

Many people find the cost savings a good enough reason to quit. This doesn't just refer to the cost of tobacco products but also the amount of money spent on health care for tobacco-related illnesses.

### **What's the link between tobacco use and back pain?**

There is evidence that tobacco users (especially smokers) are at increased risk of low back pain. In fact, exposure to tobacco smoke in nonsmokers has been shown to increase pain and pain intensity affecting many parts of the body, including the back.

Nicotine has also been linked with accelerated disk degeneration although the exact mechanism for this remains unknown. Smoking has a negative effect on wound healing, bone graft incorporation, and pain reduction. Smoking slows down and alters the normal processes of repair cells in the body called *fibroblasts*. This effect contributes to slower repair of injured tissue.

Smoking also appears to contribute to increased fibroblast accumulation in some wounds, allowing cells that would normally die to remain alive, but with decreased mobility (movement). These slower fibroblasts collect in areas of the wound where they are not needed and inhibit normal healing. Instead of healing normally, the wound fails to heal or fills in scar tissue. This explains why healing after back surgery can be delayed in those who use tobacco products.

There is also a known association between smoking and *pseudoarthrosis* (nonunion with the formation of a "false joint") after spinal fusion. Examination 1 to 2 years after surgery shows that as much as 40 per cent of smokers

who have spinal fusion surgery develop a pseudoarthrosis. Among nonsmokers, the rate is much lower (less than 10 per cent).

### **Why is it so hard to stop using tobacco?**

Tobacco use isn't just a habit – it's a powerful addiction. It takes willpower to kick a bad habit. It takes willpower and much more to overcome an addiction. Nicotine is a drug that stimulates the brain to crave it. Within seconds of smoking, nicotine reaches the brain and triggers the release of dopamine and other chemicals that activate nerve endings. The brain's reward center for is flooded with these chemicals. The result is a feeling of pleasure that is reinforced over and over each time you smoke or chew. Without nicotine, withdrawal symptoms create a craving for that next nicotine hit to the pleasure zone.

Knowing the dangers of smoking isn't enough to motivate most people to quit. Even when smokers or other tobacco users see a loved one die from use of this substance, it isn't any easier to quit. Besides nicotine being an addictive drug, the habitual act of smoking tobacco products or chewing tobacco actually adds a psychologic component that must be overcome as well. But many people have done it and you can too!

### **Treatment**

What treatment options are available?

The majority of current tobacco users want to break this habit. There are many local, state, and national programs designed to help tobacco users stop using all forms of tobacco. Your primary care physician or local physician's assistant or nurse practitioner can guide you through a tobacco-cessation process utilizing support from local services.

There are two main ways to approach tobacco or smoking cessation: *cold turkey* (all at once) or with *nicotine replacement therapy* (NRT).

Going “cold turkey” refers to quitting the use of all tobacco all of a sudden and never going back. This method is less expensive and faster than nicotine replacement therapy but it is more difficult in the short-term.

Nicotine replacement therapy uses a nicotine patch, inhaler, gum, or lozenges (all sold over-the-counter without a prescription) to ease the symptoms of nicotine withdrawal. Your physician may also prescribe other medications such as an antidepressant (e.g., Zyan or Wellbutrin) or Chantix (varenicline).

Zyan replaces the “high” that nicotine provides by increasing the brain’s supply of the dopamine neurotransmitter. Chantix blocks nicotine receptors in the brain so the nicotine can’t activate the brain’s pleasure center. Instead, dopamine is slowly released, easing the withdrawal symptoms.

As with any medication, adverse side effects can occur. If you experience irritability or agitation, depression, vivid dreams, drowsiness, or suicidal thoughts (rare), nausea, insomnia, or headaches, see your doctor right away. A change in dosage or medication may be all that’s needed.

Regardless of which route you go (cold turkey versus nicotine replacement therapy), plan on making use of smoking cessation counseling or support groups. Studies show that people who get help to stop using tobacco are much more successful than those who try to quit on their own.

The U.S. Public Health Service suggests the following plan called the **STAR quit plan** for tobacco (smoking) cessation:

Set a quit date within two weeks of your decision to stop using tobacco/smoking.

Tell family, friends, and coworkers about your decision to quit and ask for their support.

Anticipate challenges to quitting, especially during the first few weeks.

Remove all tobacco products from your work, home, and car.

Exercise is a key tool in fighting cravings. Study after study has shown that exercise reduces cravings for up to 50 minutes afterwards. For those who don’t like exercise, there is good news. Long workouts aren’t necessary. Even a five-minute walk can make a difference.

Other activities that you may enjoy (and perhaps had to give up when you were smoking) such as bowling, golfing, gardening, dancing, bicycling, swimming, horseshoes or other active games can provide you with beneficial yet enjoyable physical activity and exercise.

Some people seek alternative help through acupuncture, hypnosis, herbal remedies, biofeedback, or other forms of complementary care. If you prefer an on-line approach, the American Lung Association has a website that will take you through several steps toward tobacco cessation (<http://www.lungusa.org/stop-smoking/>).

*Freedom From Smoking* is an online group clinic that teaches the skills and techniques that have been proven to help tobacco users quit. You can participate before you are even ready to get serious about cessation and continue all the way through to successful completion of the program. A small financial commitment provides you with the necessary ingredients for successful tobacco cessation, daily/weekly support, and tips for staying tobacco free. You can go on-line and access this tool at [www.ffsonline.org](http://www.ffsonline.org).

For free advice, counseling, and education, check out the [smokefree.gov](http://www.smokefree.gov) website at [www.smokefree.gov](http://www.smokefree.gov).

Most experts recommend a tobacco cessation program that combines many of these stop-smoking aids. Attending support group meetings, having a partner to quit with, making use of on-line programs, and seeking counseling are all tools that help with long-term successful tobacco cessation.

## Recovery

### What should I expect as I go through tobacco cessation?

Not everyone is successful the first time they attempt to quit using tobacco. That is okay. Each time a person makes the effort, he or she is that much closer to being successful. Because tobacco is so highly addictive, quitting smoking is hard but not impossible. This is one time that the old expression, “If at first you don’t succeed, try, try again” is excellent advice.

You can expect real changes in your body within 20 minutes of tobacco cessation. For example, your blood pressure and pulse rate will drop. Within the first eight hours of tobacco cessation, your oxygen levels will increase and within the first 24-hours, your risk of heart attack decreases.

If you hold out for two-days, you will start to notice an increased ability to taste and smell again. By the end of two weeks, your ability to exercise will be noticeably better. For more details of the day-by-day, week-by-week, month-by-month, and year-by-year changes you can expect as a result of this life-changing decision you have made, go to the American Cancer Society’s webpage ([www.cancer.org](http://www.cancer.org)) and type in the search window: when smokers quit.

No method of quitting or effort made toward quitting is successful unless you are genuinely committed to it and have support to achieve this goal. Why not get started now by calling the American Cancer Society’s

Quit For Life: 866-784-8454. You can also find an individual program in your state called *Quit Line* by going on-line and typing in the search line: tobacco quit line.

Join the thousands of teens and adults who have already taken this bold and courageous step. Regain energy, health, and money and improve the quality of life for your family and friends. They will thank you when they no longer have to suffer the effects of second hand smoke. It’s a win-win situation for everyone!

## Notes