



## A Clever Trap

Nicotine is a clever trap. It makes you feel more relaxed, focused, and able to face the next challenge. It even helps some of you control your weight. That feeling of confidence and pleasure comes from a chemical called dopamine, which the nicotine in cigarette smoke causes to be released in the brain.

## Is Every Smoker An Addict?

No. How a person's body handles nicotine is biologically determined. In other words, your level of addiction is largely determined by your genes. Some people can be "social smokers and have just an occasional cigarette. They experience the same harmful effects from each cigarette, but they do not have the genetic makeup that causes them to be susceptible to the addictive properties of nicotine.

**FACT:**  
Cigarette smoke contains more than 7,000 harmful chemicals.

The brains of other smokers, however, undergo actual physical change. Their brains become demanding and can no longer function normally without nicotine. This is addiction, and it can happen quickly in susceptible people. Teenagers, a particularly susceptible group, can become addicted in just a few weeks.

## How Can I Tell If I'm Addicted?

If you feel discomfort after going for a certain period of time without a cigarette, you are experiencing withdrawal — a sure sign of addiction. The earlier in the day that you need to light up can indicate your level of addiction. If you need a cigarette immediately or soon after waking, your level of addiction is high, and quitting may be tougher (but not impossible) for you. A combination of medication, behavioral changes, and participation in a program with ongoing support is likely to be the best way to help you quit.

# What Happens To My Body When I Smoke?

While the nicotine is giving your brain pleasure, you're also inhaling a variety of toxic chemicals.

## The Heart, Brain, and Circulation

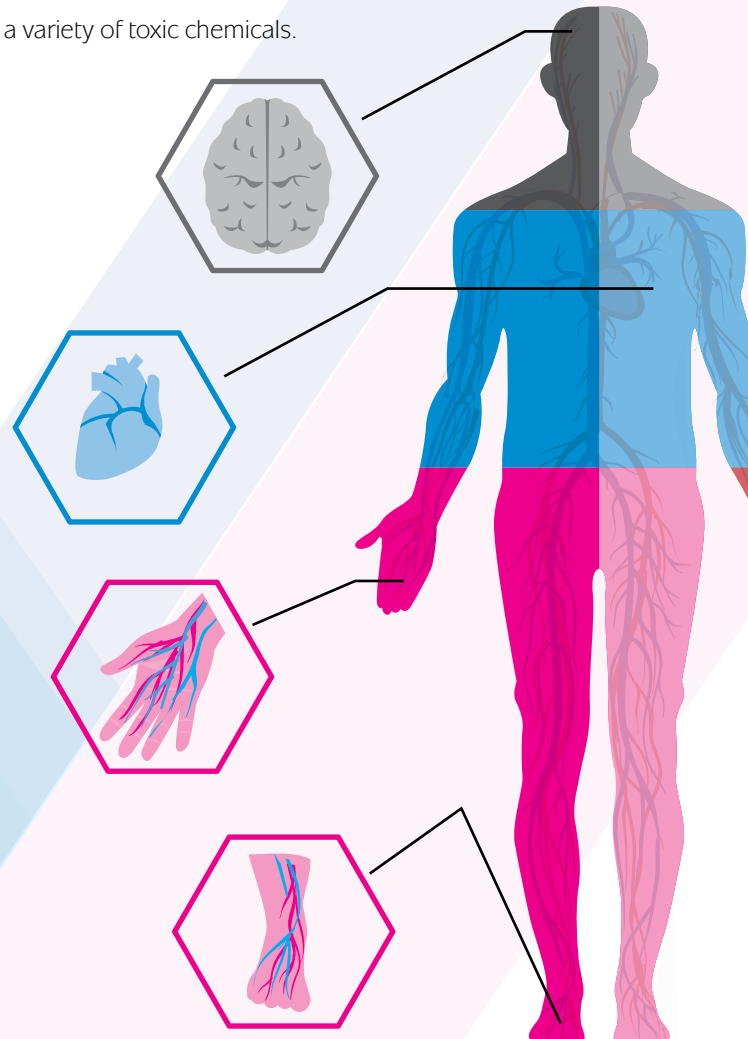
Burning, toxic chemicals reach your lungs and enter your bloodstream with each puff, making your blood very prone to clotting. The toxicants travel to every organ in the body, injuring the vessels. Inflammation sets in, called oxidative stress.

**FACT:**  
8.6 million Americans live with a serious illness caused by smoking.

Plaque (think rust), made of deposits of cholesterol and scar tissue, builds up in your arteries. Your blood, now prone to clotting, sticks to the injured vessel wall, making a heart attack or stroke more likely to occur. The clotting effect is not blocked by aspirin. The only way to reverse it is to quit smoking.

### When You Quit:

When you quit, there is a dramatic and rapid end of this clotting tendency. Vessel injury decreases. To get that benefit, you must get down to zero cigarettes. Even environmental tobacco smoke exposure, such as from a relative who smokes, has a harmful effect. In one year, your risk of having a heart attack drops by half. In five years, your risk of having a stroke returns to that of a nonsmoker.



## The Lungs

Smoking inflames and injures your lungs by depositing tar and hot chemicals in delicate tissues. The tar, carcinogens, and caustic substances that cigarettes deposit (as seen in the picture on the right of an actual smoker's lung) cause bronchitis, emphysema, lung cancer, and a variety of other lung diseases. When emphysema occurs, holes develop in the lung. These holes progressively occur throughout your lungs until there isn't enough normal tissue left to support breathing. You become short-winded, first with running and on stairs and eventually even when walking on flat ground.

**FACT:**  
90% of lung cancer is caused by smoking.

### *When You Quit:*

In eight hours, the carbon monoxide (a toxic gas) levels in your bloodstream drops by half, and oxygen levels return to normal. In 72 hours, your bronchial tubes relax, and your energy level increases. Your emphysema symptoms are greatly reduced. In three to nine months, coughing, wheezing, and breathing problems dissipate as your lung capacity improves by 10%. In 10 years, your risk of lung cancer is half of that of a smoker.

## Other Organs

Smoking causes many other diseases thanks to cancer-causing chemicals that get into your throat, organs, and blood stream. These include cancers of the esophagus, larynx (voice box), mouth, throat, kidney, bladder, pancreas, stomach, and cervix. Smoking can also cause acute myeloid leukemia.

### *When You Quit:*

In weeks, healing processes begin in your body. Just a few years after quitting, your risk of all smoking-related cancers declines. The risk of loss of limb, blindness, proteinuria, and kidney failure goes down.

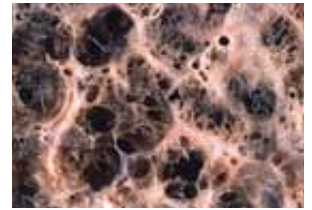


Healthy Lungs



Smoker's Lungs

*Here is a picture of the actual holes of emphysema in a real lung. You can see the tar deposits from the cigarettes around the damaged areas. There is only one treatment for emphysema, and that is to quit smoking!*



Emphysema in a Lung

## Your Senses and Appearance

Smoking dulls your senses of smell and taste. It prematurely ages your skin and causes gum disease and tooth loss. The odor of cigarette smoke clings to your skin, hair, and clothing.

### *When You Quit:*

Within 48 hours, your senses of taste and smell return to normal. You'll look and feel better almost immediately.

## Special Notes

**FOR PEOPLE WITH DIABETES:** Like smoking, diabetes affects the entire body. The combination of smoking and having diabetes can be doubly damaging.

**FOR WOMEN:** Cigarettes are associated with reduced fertility and early menopause. For women who are pregnant, the decrease in oxygen puts your unborn baby at risk for premature birth and other problems.

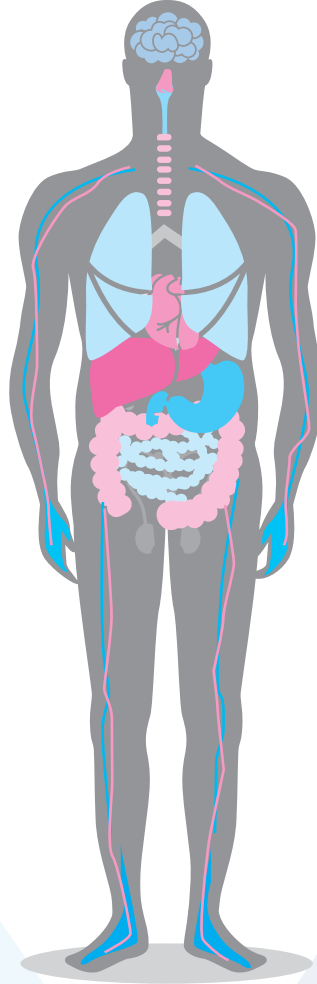
**FOR MEN:** Smoking causes impotence, which is reversible when you stop smoking.

# When You Stop Smoking, Good Things Happen

Much of the damage cigarettes cause is reversible or improved once you quit.

DECREASES

- Stroke risk
- Eye damage risk
- Throat and voice box cancer risk
- Esophageal cancer risk
- Lung cancer, chronic bronchitis, and emphysema risk
- Colds and respiratory infection risk
- Shortness of breath
- Hardening of arteries
- Nerve damage risk
- Amputation risk
- Sinus congestion
- Mouth cancer risk
- Gum disease
- Heart attack risk
- Blood pressure and pulse
- Stomach ulcer risk
- Pancreatic cancer risk
- Kidney damage risk
- Kidney cancer risk
- Bladder cancer risk



INCREASES

- Blood flow in hands and feet
- Temperature in hands and feet
- Healing of wounds
- Sense of smell
- Sense of taste

And...

- You'll feel incredibly free as you no longer have to seek out one of the limited smoking locations around town to light up.
- You'll save a fortune — almost \$10,000 a year for a two-pack-a-day New Yorker! (And cigarette manufacturers will no longer be profiting from your addiction.)
- You'll gain self-confidence and pride when you realize that you've actually succeeded in becoming an ex-smoker.

## Is It Too Late To Quit? Absolutely Not!

### How Do I Stop?

There are two parts to consider in this process:

1. Physical nicotine withdrawal for those who are addicted
2. Behavioral modifications by changing the way that smoking is a part of your life

### Why Can Some People Stop “Cold Turkey” And I Can't?

The level of addiction varies from person to person. How your body handles nicotine is determined genetically. Why is this important to understand? Your smoking addiction is a heavy burden, and it is important that you and your loved ones understand and accept it so you can best prepare for quitting.

The good news is that you don't have to depend on willpower alone to quit. Both medication and behavioral therapy can contribute to your success.

**FACT:**

74% of smokers want to quit.

## Physical Part

Nicotine addiction is a real brain biology problem, not just a bad habit. Nicotine withdrawal, too, is a real physical condition. For the severely addicted, withdrawal interferes with the ability to work or relax. You can get angry, irritable, depressed, and unable to concentrate.

Experience tells you that the quickest way to get rid of the awful feeling is to have a cigarette. But if you let the craving pass, you'll find that the time between cravings gets longer, and the intensity of the craving lessens. In fact, in about 48 hours, all traces of nicotine have left your body. But that doesn't mean you won't still want a cigarette. It's not easy to give up the pleasurable part. Your body may be nicotine-free, but your brain remembers how it makes you feel. Medication can help with this.

### Medication

You may be against the idea of taking medication to stop smoking and believe that you can do this without pharmacologic support. But if you are addicted, using nicotine replacement or other smoking cessation medications will double your chance of success. These medications allow your brain to function normally without becoming irritated, cranky, depressed, and unable to concentrate during your transition to a smoke-free life.

### What Medication Is Right For Me?

Your doctor or counselor will speak with you about using medication to help with nicotine withdrawal. It may be a nicotine patch, gum, an inhaler, a medication called bupropion, which can be used with or without nicotine replacement, or varenicline, which is used alone.

#### FACT:

The right medication in the right dosage **DOUBLES** your chance of successfully quitting.

### Does Nicotine Replacement Work, Even For Long-Time, Heavy Smokers?

**Yes!** Nicotine replacement therapy still has nicotine, and just like the cigarette, it prevents the craving. It's the same drug. What's the difference? Smoking gives a fast "hit". The patch is slow and unexciting, but it works. Put it on early, and if you need to, back it up with a faster delivery system like the gum.

Multiple studies support the use of nicotine replacement therapies:

- When airplanes went smoke-free, the pilots, who were often smokers, reported lapses in concentration that could interfere with safely landing their planes. When they had nicotine replacement, such as from the patch, they were able to focus and land safely.
- The same thing happens for students taking tests or athletes on the field. When experiencing nicotine withdrawal, they couldn't function very well. Given the correct dose of nicotine, however, they were able to perform at their pre-withdrawal levels.

### "I tried the patch, and it didn't help."

To work, **THE DOSE MUST BE CORRECT.** It must equal the amount of nicotine that you are accustomed to having in your body. If you are a heavy smoker, you will need higher doses of nicotine replacement or possibly a combination of medications such as the patch and gum.

### Why Are You Giving Me What I Am Addicted To?

It may seem strange to take nicotine to quit smoking when it is nicotine that you are trying to get away from. The reason this works is that the medication satisfies your need for nicotine without giving you any pleasure, or the quick hit that the cigarette provides. It is very slow — so slow that your body receives no pleasure or even sense of nicotine, but pacifies the nicotine-hungry brain's craving. It also breaks the ritual of the smoking habit, doubling your chance of success. As you become comfortable not smoking, the dose of nicotine is gradually reduced and finally stopped.

### What Medications Don't Contain Nicotine?

**BUPROPION** (also called Wellbutrin or Zyban): Your doctor may prescribe a medicine called bupropion that helps curb your desire to smoke, limit your cravings, and lessen depression. If you have been depressed, it is important to let your doctor know because bupropion may be particularly helpful. You can take bupropion along with nicotine-replacement medications.

**VARENICLINE** (also called Chantix): Another highly effective medicine for stopping smoking is varenicline. The desire to smoke reduces in approximately seven days. Varenicline should be taken for several months. Side effects may include nausea and strange dreams. Some people may become very depressed and even suicidal while taking varenicline. Your doctor should ask a family member to be aware of this and to monitor you for any change of mood. If you do experience any change of mood, you need to stop varenicline immediately and speak to your doctor. The effectiveness of this drug is very real. You and your doctor need to discuss this option in light of previous quit attempts, your level of addiction, and the vulnerability of your health.

## Behavioral Part

If you are highly addicted, quitting will be most successful if you combine medication with behavioral changes. Participating in a program with ongoing support is likely to be very helpful.

### Changing Habits

It is important to look at the reasons why you smoke to plan a lifetime change, not just while you are taking medication. Create a clear plan for limiting your stress and avoiding situations that upset you. Exercise regularly. Give yourself real rewards. Build relaxation into your day. Develop hobbies and new habits that will bring more pleasure into your life.

IF YOU USE CIGARETTES TO HELP YOU...	TRY ONE OF THESE SUBSTITUTES
Handle Stress	<ul style="list-style-type: none"> <li>• Squeeze a squishy ball.</li> <li>• Silently repeat any mantra, such as: "This will pass." or "Calm down, this is no big deal."</li> <li>• Take a quiet walk.</li> <li>• Practice yoga.</li> </ul>
Alleviate Boredom	<ul style="list-style-type: none"> <li>• Do a crossword puzzle.</li> <li>• Play a game on your phone.</li> <li>• Plan a vacation.</li> <li>• Have a project, such as organizing old photos or cleaning out a closet.</li> </ul>
Avert Anger	<ul style="list-style-type: none"> <li>• Take deep breaths.</li> <li>• Write down a list of things that you're grateful for.</li> <li>• Buy a joke book or app and turn your attention to something funny.</li> </ul>
Counter Depression	<ul style="list-style-type: none"> <li>• Interact with nature by taking a walk, planting a windowsill garden, or listening to recorded nature sounds.</li> <li>• Join a support group.</li> <li>• Talk with a therapist.</li> </ul>
Socialize	<ul style="list-style-type: none"> <li>• Enjoy places that ban smoking, like restaurants, parks, concert halls, etc.</li> <li>• Make plans with family and friends who are nonsmokers.</li> </ul>

### Handling Triggers

Certain activities trigger a real urge to smoke. You can retrain yourself to respond to these triggers in new and different ways.

POSSIBLE TRIGGERS	TRY ONE OF THESE SUBSTITUTES:
Talking On The Phone	<ul style="list-style-type: none"> <li>• Doodle if you're on your landline.</li> <li>• If walking with your cell, step into a store or other place in which smoking is not allowed.</li> </ul>
Having Your Morning Coffee	<ul style="list-style-type: none"> <li>• For a few days or weeks, substitute hot chocolate, orange juice, or any other beverage for your coffee.</li> </ul>
Waiting For The Bus	<ul style="list-style-type: none"> <li>• Play a game on your phone.</li> <li>• Walk quickly to the next stop.</li> </ul>
Having A Drink	<ul style="list-style-type: none"> <li>• Don't step outside for a smoke break.</li> <li>• Switch to fruit juices and tonic for a time.</li> </ul>
Being With Friends And Family Who Smoke	<ul style="list-style-type: none"> <li>• For a while, you may have to avoid certain people if they insist upon smoking around you. Try challenging them to join you in not smoking. Make a contest of it.</li> </ul>

## Final Thoughts

### Have An Immediate Plan For Countering Cravings

Even on medication you can still have cravings. They may be intense or subtle (“just one puff”). Put the thought out of your mind. Take a few deep breaths. Pop a mint in your mouth, take a sip of water, and turn to a distraction. The intense feeling goes away very quickly, whether you have a cigarette or not.

### Ask A Buddy to Help Who Understands the Importance of Quitting

Give him or her a call for some encouragement when you feel like you might falter.

### Pick A Quit Day And Have All Your Tools Ready To Go

Choose a busy, non-stressful day, have no cigarettes in the house, and throw out all of your ashtrays. Purchase healthy snacks and have them on hand to relieve the cravings and avoid weight gain. Keep very active and go to bed early. If the thought of a quit day is too stressful, do it gradually. Give yourself a few weeks to cut down. You might want to substitute a few cigarettes for nicotine gum or try the patch and see how long you can hold out.

### What If I Relapse? It’s Okay, Just Keep On Trying

Cigarette addiction can be overcome, but it never goes completely away, even as your body becomes much healthier. If you do relapse, get back to your quit plan immediately. It is best to think of a relapse as a learning opportunity to learn from, rather than as a failure. Consider how you will handle the situation differently in the future. It is all part of becoming smoke free.

## You Have So Much to Gain



**In 15 years,** your risk of heart attack will have returned to that of a life long non smoker.

**In 10 years,** your risk of lung cancer is half of that of a smoker.

**In 5 years,** your risk of having a stroke returns to that of a non smoker.

**In 1 year,** your risk of having a heart attack will have dropped by half.

**In 3 to 9 months,** coughing, wheezing, and breathing problems will dissipate as your lung capacity improves by 10%.

**In 2 weeks,** your circulation will increase, and it will continue to improve for the next 10 weeks.

**In 72 hours,** your bronchial tubes will relax, and your energy levels will increase.

**In 48 hours,** your chance of having a heart attack will have decreased. All nicotine will have left your body. Your sense of taste and smell will return to a normal level.

**In 8 hours,** the carbon monoxide levels in your bloodstream will drop by half, and oxygen levels will return to normal.

**In 20 minutes,** your blood pressure will drop back down to normal.



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