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# Why People Start Smoking and Why It's Hard to Stop

## Why do people start smoking?

Most people who smoke started smoking when they were teenagers. Those who have friends and/or parents who smoke are more likely to start smoking than those who don't. Some teenagers say that they "just wanted to try it," or they thought it was "cool" to smoke.

The tobacco industry's ads, price breaks, and other promotions for its products are a big influence in our society. The tobacco industry spends billions of dollars each year to create and market ads that show smoking as exciting, glamorous, and safe. Tobacco use is also shown in video games, online, and on TV. And movies showing people smoking are another big influence. Studies show that young people who see smoking in movies are more likely to start smoking.

A newer influence on tobacco use is the e-cigarette and other high-tech, fashionable electronic "vaping" devices. Often wrongly seen as harmless, and easier to get and use than traditional tobacco products, these devices are a way for new users to learn how to inhale and become addicted to nicotine, which can prepare them for smoking.

## Who is most likely to become addicted?

Anyone who starts using tobacco can become addicted to nicotine. Studies show that smoking is most likely to become a habit during the teen years. The younger you are when you begin to smoke, the more likely you are to become addicted to nicotine.

According to the 2014 Surgeon General's Report (SGR), nearly 9 out of 10 adults who smoke started before age 18, and nearly all started by age 26. The report estimates that

about 3 out of 4 high school students who smoke will become adults who smoke – even if they intend to quit in a few years.

## Is smoking tobacco really addictive?

Addiction is marked by the repeated, compulsive seeking or use of a substance despite its harmful effects and unwanted consequences. Addiction is mental or emotional dependence on a substance. Nicotine is the known addictive substance in tobacco. Regular use of tobacco products leads to addiction in many users. Nicotine is a drug that occurs naturally in tobacco and it's thought to be as addictive as heroin or cocaine.

### How nicotine affects you

- Nicotine and other chemicals in tobacco smoke are easily absorbed into the blood through the lungs. From there, nicotine quickly spreads throughout the body.
- When taken in small amounts, nicotine causes pleasant feelings and distracts the user from unpleasant feelings. This makes the tobacco user want to use more. It acts on the chemistry of the brain and central nervous system, affecting mood. Nicotine works very much like other addicting drugs, by flooding the brain's reward circuits with a chemical called dopamine. Nicotine also gives a little bit of an adrenaline rush – not enough to notice, but enough to speed up the heart and raise blood pressure.
- Nicotine reaches the brain within seconds after taking a puff, and its effects start to wear off within a few minutes. The user may start to feel irritated and edgy. Usually it doesn't reach the point of serious withdrawal symptoms, but the person using the product gets more uncomfortable over time. This is what most often leads the person to light up again. At some point, the person uses tobacco, the unpleasant feelings go away, and the cycle continues. If the person doesn't smoke again soon, withdrawal symptoms get worse over time.
- As the body adapts to nicotine, people who use it tend to increase the amount of tobacco they use. This raises the amount of nicotine in their blood, and more tobacco is needed to get the same effect. This is called *tolerance*. Over time, a certain nicotine level is reached and the person will need to keep up the usage to keep the level of nicotine within a comfortable range.
- People who smoke can quickly become dependent on nicotine and suffer physical and emotional (mental or psychological) withdrawal symptoms when they stop smoking. These symptoms include irritability, nervousness, headaches, and trouble sleeping. The true mark of addiction, though, is that people still smoke even though

they know smoking is bad for them – affecting their lives, their health, and their families in unhealthy ways. In fact, most people who smoke want to quit.

Researchers are also looking at other chemicals in tobacco that make it hard to quit. In the brains of animals, tobacco smoke causes chemical changes that are not fully explained by the effects of nicotine.

The average amount of nicotine in one regular cigarette is about 1 to 2 milligrams (mg). The amount you actually take in depends on how you smoke, how many puffs you take, how deeply you inhale, and other factors.

### **How powerful is nicotine addiction?**

About 2 out of 3 of people who smoke say they want to quit and about half try to quit each year, but few succeed without help. This is because they not only become physically dependent on nicotine. There's also a strong emotional (psychological) dependence. Nicotine affects behavior, mood, and emotions. If a person uses tobacco to help manage unpleasant feelings and emotions, it can become a problem for some when they try to quit. Someone who smokes may link smoking with social activities and many other activities, too. All of these factors make smoking a hard habit to break.

In fact, it may be harder to quit smoking than to stop using cocaine or opiates like heroin. In 2012, researchers reviewed 28 different studies of people who were trying to quit using the substance they were addicted to. They found that about 18% were able to quit drinking, and more than 40% were able to quit opiates or cocaine, but only 8% were able to quit smoking.

### **What about nicotine in other tobacco products?**

#### ***Nicotine in cigars***

People who inhale cigar smoke absorb nicotine through their lungs as quickly as people who smoke cigarettes. For those who don't inhale, the nicotine is absorbed more slowly through the lining of the mouth. This means people who smoke cigars can get the desired dose of nicotine without inhaling the smoke directly into their lungs.

Most full-size cigars have as much nicotine as several cigarettes. Cigarettes contain an average of about 8 milligrams (mg) of nicotine, but only deliver about 1 to 2 mg of nicotine. Many popular brands of larger cigars have between 100 and 200 mg, or even as many as 444 mg of nicotine. The amount of nicotine a cigar delivers to a person who

smokes can vary a great deal, even among people smoking the same type of cigar. How much nicotine is taken in depends on things like:

- How long the person smokes the cigar
- How many puffs are taken
- Whether the smoke is inhaled

Given these factors and the large range of cigar sizes, it's almost impossible to make good estimates of the amounts of nicotine larger cigars deliver.

Small cigars that are the size and shape of cigarettes have about the same amount of nicotine as a cigarette. If these are smoked like cigarettes (inhaled), they would be expected to deliver a similar amount of nicotine – 1 to 2 mg.

### ***Nicotine in smokeless tobacco***

Smokeless tobacco delivers a high dose of nicotine. Nicotine enters the bloodstream from the mouth or nose and is carried to every part of your body.

Nicotine in smokeless tobacco is measured in milligrams (mg) of nicotine per gram (g) of tobacco. It's been found to vary greatly, for instance as much as 4 to 25 mg/g for moist snuff, 11 to 25 mg/g for dry snuff, and 3 to 40 mg/g for chew tobacco. Other factors that affect the amount of nicotine a person gets include things like:

- Brand of tobacco
- Product pH level (how acidic it is)
- Amount chewed
- Cut of tobacco

Still, blood levels of nicotine have been shown to be much the same when comparing people who smoke cigarettes to those who use smokeless tobacco.

### ***Nicotine in non-combusted products***

Non-combusted tobacco products come in various forms and are used in different ways. Non-combusted products contain nicotine and can lead to nicotine addiction.

- Non-combusted (heat-not-burn) cigarettes have a heating source and tobacco. The tobacco is heated to a lower temperature than a regular (combustible) cigarette. The heat creates an aerosol that is inhaled by the user.

- Dissolvable tobacco products are edible. They can be lozenges, strips, gummies, or sticks. They can be easily hidden and can look like candy.
- Nicotine gels are tobacco products that are rubbed on, and absorbed by, the skin.

### ***Nicotine in e-cigarettes***

The e-liquid in most e-cigarettes (vapes) contains nicotine. However, nicotine levels are not the same in all types of e-cigarettes, and sometimes product labels do not list the true nicotine content.

There are some e-cigarette brands that claim to be nicotine-free but have been found to contain nicotine.

### **Why is it so hard to quit tobacco?**

Stopping or cutting back on tobacco causes symptoms of nicotine withdrawal. Withdrawal is both physical and mental. Physically, your body is reacting to the absence of nicotine. Mentally, you are faced with giving up a habit, which calls for a major change in behavior. Emotionally, you might feel like as if you've lost your best friend. Studies have shown that smokeless tobacco users have as much trouble giving up tobacco as people who want to quit smoking cigarettes.

People who have used tobacco regularly for a few weeks or longer will have withdrawal symptoms if they suddenly stop or greatly reduce the amount they use. There's no danger in nicotine withdrawal, but the symptoms can be uncomfortable. They usually start within a few hours and peak about 2 to 3 days later when most of the nicotine and its by-products are out of the body. Withdrawal symptoms can last a few days to up to several weeks. They get better every day that a person stays tobacco-free.

### **Nicotine withdrawal symptoms can include any of the following:**

- Dizziness (which may last a day or 2 after quitting)
- Depression
- Feelings of frustration, impatience, and anger
- Anxiety
- Irritability
- Trouble sleeping, including trouble falling asleep and staying asleep, and having bad dreams or even nightmares
- Trouble concentrating

- Restlessness or boredom
- Headaches
- Tiredness
- Increased appetite
- Weight gain
- Slower heart rate
- Constipation and gas
- Cough, dry mouth, sore throat, and nasal drip
- Chest tightness

These symptoms can lead a person to start using tobacco again to boost blood levels of nicotine and stop symptoms.

## Hyperlinks

1. [smokingcessationleadership.ucsf.edu/](http://smokingcessationleadership.ucsf.edu/)

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Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as journalists, editors, and translators with extensive experience in medical writing.

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