

CIGARETTE AND TOBACCO PRODUCT USE

Abstract:

The use of tobacco products has decreased significantly since the 1970s and over the last 5 years adult use has dropped from 23% to 17.8% and youth usage has dropped dramatically from 44% to 15.7%. There are several different nicotine-containing products to choose from, but cigarettes and snuff (dip) are probably the most well-known. People use tobacco products for many different reasons like stress relief, pleasure, or when in certain social situations. When initially using tobacco products people probably didn't realize the detrimental consequences tobacco products have on physical health. The use of tobacco products has been linked to chronic obstructive pulmonary disease (COPD), chronic bronchitis (bronchial tubes become swollen and irritated and pathways to lungs narrowed), emphysema (sacs of air in lung tissue are destroyed), lung cancer, and even death. These detrimental consequences are directly linked to the carcinogens and toxic chemicals found within tobacco products. The addictive property of nicotine contributes to the long-term use and the challenge of cessation of tobacco products.

Learning Objectives:

1. List the many different types of tobacco products.
2. Explain the effects tobacco products have on physical health.
3. Describe the types of support available for those struggling with tobacco usage.

Introduction

The CDC reported in March of 2022 that tobacco use is the leading cause of preventable disease, disability, and death in the United States. Close to 40 million U.S. adults smoke cigarettes, and it is estimated that 2.55 million middle and high school students use at least one tobacco product, including e-cigarettes. Research has identified a range of factors that influence patterns of smoking. These include low income, nicotine exposure as a child, stress, anxiety and depression, peer example, and intense marketing of tobacco products. Population groups with higher smoking rates are more likely to be in environments where smoking is the norm and environments that are pro-smoking influence the uptake of smoking, smoking patterns, and quitting intentions.

Tobacco Products

There are several different types of tobacco products on the market, all of which contain nicotine. Cigarettes, pipes or hookah pipes (smoke passes through water for the cooling process), cigars, and herbal cigarettes are all products that are absorbed primarily through the lungs. Smokeless tobacco comes in several forms. Chewing tobacco are stands of tobacco that are chewed and then held in the mouth. Snuff is dried tobacco in a powder form that is inhaled through the nose where snus and dip are moist tobacco, normally held in the mouth, between the teeth and cheek or lip.

'Heat not burn' or smokeless tobacco products are electronic devices that contain tobacco. The tobacco is heated to a high temperature, without starting it on fire but creating 'smoke' that the user inhales. There has been a growth in popularity in recent years of smokeless tobacco, particularly with young people pursuing smoke-free substitutes.

Reasons for Tobacco Use

There are many reasons why people begin using tobacco products. Listed below are the top 10 reasons why someone picks up that first cigarette or tries smokeless tobacco for the first time.

1. Peer Pressure
2. Social Rewards
3. Risk-taking Behavior
4. Parental Influence
5. Misinformation
6. Genetic Predisposition
7. Advertising
8. Self-medication
9. Media Influences
10. Stress Relief

Peer Pressure

A large reason peer pressure comes under scrutiny when thinking about tobacco use is that one of the groups most likely to begin smoking, young teenagers. This is also probably one of the most susceptible groups to peer pressure.

Social Rewards

Social rewards are the perks people receive when they participate in a group activity. Usually, this means some form of acceptance from others. For nonsmokers who lack this acceptance and social bond in their lives, the connection can be overwhelming and push them through the beginning phases of tobacco addiction, prior to the chemical and psychological holds of nicotine addiction.

Risk-taking Behavior

There is a thrill for younger individuals when pushing limits. No-smoking signs, designated smoking areas, and general restrictions on when and where to smoke are another way to push against these rules.

Parental Influence

Children of parents who are active smokers are more likely to start smoking than children of nonsmokers, or children of parents who quit smoking. Studies have found that parents who socially accept smoking behavior, even if they don't smoke, can leave the impression it is okay for their children to experiment with tobacco products. Parents committed to raising smoke-free children have to be committed to communicating that smoking is dangerous, unhealthy, and unacceptable.

Misinformation

A study of Japanese literature on smoking revealed that it is promoted as a source of increased health and vitality in their culture. Myths that so-called "light" cigarettes are less harmful than others, or that certain brands of cigarettes aren't as dangerous as other brands. This attitude may keep people smoking longer or just switching brands.

Genetic Predisposition

Medical genetic research is beginning to suggest that addictions including addiction to nicotine, the effective ingredient in tobacco products, may have a genetic component. Research explores how a combination of a genetic susceptibility, societal factors, and other health factors, such as alcohol use, can make a person more likely to begin smoking than another.

Advertising

Advertising is a powerful tool that plays a large role in whether people decide to start smoking or not. Tobacco companies have a history of targeting

potential new smokers, young adults, through the use of colorful, catchy ads with stylish cartoon characters.

Self-medication

Just like any prescription or illicit drug, nicotine changes the body's chemistry and functioning when it enters the system. When a flood of chemicals is released into the nervous system by nicotine, positive sensations, such as reduced tension or appetite, or a heightened sense of well-being can occur. Research has shown that clients suffering from depression or anxiety disorders may begin smoking because it can help mitigate or alleviate some of their symptoms.

Media Influences

Studies have suggested that when viewers, especially young viewers, see a popular character smoking, they are more likely to see smoking as something socially acceptable, stylish, cool, and desirable. Researchers see the media over-representing smoking which only adds to the problem.

Stress Relief

For many individuals, smoking or smokeless tobacco is a way to relieve the stress and tension that comes with life situations such as a high-pressure job or financial strain. Tobacco becomes a psychological, as well as a chemical crutch, and sends the person instinctively reaching for a cigarette. This tool they had used to alleviate stress has now become a stressor, as they shift from fighting through a difficult situation with the help of nicotine to fighting the nicotine itself.

Mental Health Conditions

Smoking is much more common among adults with mental health conditions, such as depression and anxiety than in the general population.

About 3 out of every 10 cigarettes smoked by adults in the United States are smoked by people with mental health conditions. Research has illustrated that for those who suffer from severe mental illness, cigarettes and smokeless tobacco may become a form of self-medication to alleviate some of their symptoms. Why smokers are more likely than nonsmokers to experience depression, anxiety, and other mental health conditions is uncertain. More research is needed to determine this. No matter the cause, smoking is not a treatment for depression or anxiety. Getting help for your depression and anxiety and quitting smoking is the best way to feel better.

Effects of Tobacco Use

Which parts of the body could be damaged by tobacco use over time? Many body systems are affected by smoking tobacco like the respiratory system, the cardiovascular system, and the nervous system. Chewing tobacco can cause many types of cancer, including cancer of the mouth, tongue, gums, stomach, esophagus (throat), and bladder.

Tobacco is incredibly harmful to your health and there is no safe way to replace your tobacco to make it safe and avoid health risks. Replacing your cigarette with a cigar, pipe, or chewing tobacco will not alter the effects it has on your body. According to the American Lung Association cigarettes contain around 600 ingredients and when they are burned, they generate more than 7000 chemicals, 69 of which are linked to cancer. These same ingredients are found in cigars and tobacco smoked in pipes.

The Centers for Disease Control and Prevention (CDC) states that smoking is the most common “preventable cause of death” in the United States. While the effects of smoking may not be immediate, the complications and damage can last for years. The good news is that quitting smoking can reverse many of these effects.

Smokeless tobacco has been linked to several different types of cancer, including cancer of the mouth, esophagus, and the pancreas. Smokeless

tobacco contains at least 28 different cancer-causing chemicals (carcinogens) and when the mouth is exposed repeatedly to these carcinogens the likelihood of cancer increases.

Smokeless tobacco use can cause gum disease, tooth decay, tooth loss, and the formation of white or gray patches inside the mouth called leukoplakia. Leukoplakia is different from other causes of white patches such as thrush or lichen planus (common disease that causes inflammation, swelling, and irritation) because it can eventually develop into oral cancer. The likelihood of developing cancer from leukoplakia depends on the size, shape, and appearance of abnormal cells. Within 15 years, about 3% to 17.5% of people with leukoplakia will develop cancer.

If using smokeless or smoking tobacco during pregnancy it increases the risk of premature delivery, low birth weight, birth defects, and in some circumstances, stillbirth. If a woman smokes or uses smokeless tobacco and is planning pregnancy, cessation is extremely important. If the pregnancy is not planned, appropriate advice is that stopping any time before 16 weeks is best, but stopping after this is still beneficial.

Central Nervous System

Nicotine is a mood-altering drug and reaches the brain within seconds creating an energized feeling. When this effect begins to wear off the feeling changes to sluggish or tired and the person craves more. Nicotine is habit forming and this turns into a vicious cycle of using tobacco to feel energized but end up feeling sluggish and run down.

Withdrawal from nicotine can impair cognitive functioning causing anxious, irritated, and depressed feelings. Withdrawal can also cause headaches and sleep issues.

Research suggests that people who use smokeless tobacco get as much or more nicotine into their bodies as people who smoke cigarettes. Just as

with smoking, withdrawal from smokeless tobacco can cause intense cravings, irritability, and depressed mood.

Respiratory System

Inhalation of smoke damages lung tissue and in time can lead to increased infections like pneumonia and other non-reversible chronic lung conditions. Children who are exposed to second-hand smoke are more susceptible to asthma and bronchitis.

Non-reversible chronic lung conditions are:

1. Emphysema (destruction of the air sacs, alveoli in the lungs)
2. Chronic bronchitis (permanent inflammation that affects the lining of the breathing tubes of the lungs)
3. Chronic obstructive pulmonary disease (COPD)
4. Lung cancer

Cardiovascular System

Tobacco use can damage the entire cardiovascular system. Nicotine reacts on the blood vessels causing them to tighten and this impedes their ability to dilate which restricts the flow of blood. Over time, the ongoing inability to dilate or constrict, along with damage to the blood vessels, can cause peripheral artery disease. Peripheral artery disease is also called peripheral arterial disease and is a condition where narrowed arteries reduce blood flow to the limbs, the arms, and/or legs. In peripheral artery disease (PAD), the legs or arms, usually the legs, don't receive enough blood flow to keep up with demand. A symptom of PAD is pain which normally occurs when walking.

Tobacco use also increases blood pressure because of the inability of the vessels to dilate properly. With the increased blood pressure and weakened vessel walls the increased likelihood of having a stroke increases. Cigarette

smoking is an independent risk factor for both ischemic and hemorrhagic stroke in both men and women.

An ischemic stroke is caused by a blockage in the vessel, usually a clot, and can occur in the carotid artery of the neck as well as other arteries. This is the most common type of stroke. A hemorrhagic stroke occurs when there is damage to a vessel causing blood to move outside of the vessel and into the brain.

Individuals exposed to second-hand smoke have a 20% increase in the likelihood of having a stroke. Numerous globally based studies evaluate the association between stroke and cigarette smoking. These studies were performed across various ethnicities and populations and demonstrated a strong association between smoking and stroke risk. Current smokers were shown to have at least a two-to-fourfold increased risk of stroke compared with lifelong nonsmokers or individuals who had quit smoking more than 10 years prior.

Tobacco use is a risk factor for coronary artery disease (CAD) and a known factor influencing the severity and pattern of CAD. You're also at an increased risk of worsening heart disease if you've already had heart bypass surgery, a heart attack, or a stent placed in a blood vessel. Those individuals who have not been diagnosed with coronary artery disease have an increased likelihood of a more than two-fold higher risk of coronary heart disease.

PubMed reported in eleven studies with 6037 participants, that smoking was found to be related to CAD severity and location of the damaged artery in the heart. However, there was no significant association of smoking with the number of damaged arteries and location of arterial occlusion.

Smoking not only impacts your cardiovascular health, but also the health of those around you who don't smoke. Exposure to secondhand smoke carries the same risk to a nonsmoker as to someone who does smoke. Risks include stroke, heart attack, and heart disease.

Similarly, those who smoke had an increased likelihood of having a higher coronary artery calcium (CAC) score which can lead to plaque formation within the arteries. A specialized X-ray test that provides pictures of your heart can help your doctor detect and measure calcium-containing plaque in your arteries.

The plaque inside the arteries of your heart can grow and restrict blood flow to the muscles of your heart. Measuring calcified plaque with a heart scan may allow your doctor to identify possible coronary artery disease before you have signs and symptoms.

Smokeless tobacco can increase your heart rate and blood pressure. Long-term use of smokeless tobacco increases your risk of dying of heart disease and stroke.

Vision Loss

The CDC states that tobacco use causes changes in the eyes that can lead to vision loss.

1. Tobacco users are twice as likely to develop age-related macular degeneration compared with people who do not use tobacco.
2. Tobacco users are two to three times more likely to develop cataracts compared with people who do not use tobacco.

Type 2 Diabetes

We now know that tobacco use is one cause of type 2 diabetes. In fact, people who use tobacco are 30%–40% more likely to develop type 2 diabetes than people who don't use tobacco. People with diabetes who utilize tobacco are more likely than those who don't have trouble with insulin dosing and with managing their condition. The more tobacco you use, the higher your risk for type 2 diabetes.

HIV

If you use tobacco and have HIV, you're more likely to get HIV-related infections, including:

1. Thrush (a mouth infection, also called oral candidiasis)
2. Hairy leukoplakia (white mouth sores)
3. Bacterial pneumonia
4. *Pneumocystis* pneumonia, a dangerous lung infection

Tobacco use when you have HIV also makes you more likely to get other serious illnesses than nonsmokers with HIV. These illnesses can make you too sick to work (disabled) or even lead to an early death. They include:

1. COPD (chronic obstructive pulmonary disease, a serious lung disease that causes severe breathing problems and includes emphysema and chronic bronchitis)
2. Heart disease and stroke
3. Lung cancer, head and neck cancer, cervical cancer, and anal cancer

Integumentary System (skin, hair, and nails)

The more apparent signs of tobacco use involve skin changes. Those substances within the tobacco and the smoke from tobacco that are harmful to the rest of the body change the structure of your skin. A recent study has shown that tobacco use dramatically increases the risk of squamous cell carcinoma (skin cancer).

Fingernails and toenails certainly are not immune from the effects of tobacco use. Tobacco use increases the likelihood of fungal nail infections and discoloration of the nails and skin primarily affects the hand in which the cigarette or other smoking device is held.

Nicotine can also cause negative effects on hair. An older study found that the use of smoking tobacco increases the rate of hair loss, can result in balding, and can heighten the rate at which hair grays.

Digestive system

Tobacco use increases the risk of mouth, throat, larynx, and esophagus cancer due to the direct contact of smoke and other harmful chemicals that have direct contact with the tissues. Even people who “smoke but don’t inhale” face an increased risk of mouth cancer.

Tobacco use is also related to higher rates of pancreatic cancer. Evidence indicates that carcinogenic compounds in tobacco stimulate pancreatic cancer progression through the process of inflammation and fibrosis. These two factors in direct correlation along with genetic factors produce an environment that inhibits cell death. This creates the perfect condition for the growth and these cancer cells that would have normally been eliminated by the immune system and natural cell death.

Insulin resistance has been linked to the use of tobacco products. This increases the risk of type 2 diabetes and its complications, which tend to develop at a faster rate than in people who have never used tobacco products or no longer use tobacco products.

The use of chewing tobacco and other smokeless tobacco products increases the risk of cancer of the mouth, throat, and pancreas. Smokeless tobacco also increases the risk of developing small white patches in your mouth called leukoplakia (loo-koh-PLAY-key-uh). These patches are precancerous, meaning that they have the potential to turn into cancer.

The sugar and irritants in smokeless tobacco products can cause cavities, abrasion of teeth, teeth staining, bad breath, gum disease, receding gums, bone loss around roots, and tooth loss.

Poisoning risk surrounding smokeless tobacco has been a topic of discussion due to the candy-like appearance and flavors of some smokeless tobacco products. This makes them attractive to children. Eating these products can cause nicotine poisoning. Nicotine poisoning in children may cause nausea, vomiting, weakness, convulsions, unresponsiveness, trouble breathing, and even death.

Sexuality and Reproductive System

Nicotine affects blood flow to the genital areas of both men and women. This will affect men through decreased sexual performance, and the inability to generate an erection and sustain it. For women, this can result in sexual dissatisfaction by decreasing lubrication and the ability to reach orgasm. Tobacco use may also lower sex hormone levels in both men and women and can possibly lead to decreased libido.

Addictive Properties

Nicotine is a highly addictive chemical compound present in the tobacco plant. All tobacco products contain nicotine, including cigarettes, cigars, smokeless tobacco (such as dip, snuff, snus, and chewing tobacco), hookah tobacco, and most e-cigarettes. Using any tobacco product can lead to nicotine addiction. This is because nicotine can change the way the brain works, causing cravings for more of it.

Nicotine reaches the brain within seconds if smoked and smokeless tobacco varies depending on the breakdown of the tobacco and how quickly it reaches the bloodstream. Once the nicotine reaches the brain, nicotine increases the release of brain chemicals called neurotransmitters, which help regulate mood and behavior. Dopamine, one of these neurotransmitters, is released in the reward center of the brain and causes feelings of pleasure and improved mood. While nicotine naturally occurs in the tobacco plant itself, some tobacco products contain additives that may make it easier for your body to absorb more nicotine. This process becomes a vicious cycle because

the more you utilize tobacco the more nicotine you need to feel good. Nicotine quickly becomes part of your daily routine and is interwoven with your habits and feelings.

Cigarettes average from 15 to 25 mg of nicotine each depending on the brand. Cigars have four to five times the nicotine content of cigarettes. Chewing tobacco is even more palatable because of the flavors added (honey, sugar, molasses, cinnamon, licorice, and various syrups).

Chemicals in Tobacco Products

Approximately 70 of the chemicals in cigarettes are known to cause cancer. These include but are not limited to:

1. Acetaldehyde
2. Aromatic amines
3. Arsenic
4. Benzene
5. Beryllium (a toxic metal)
6. 1,3-Butadiene (a hazardous gas)
7. Cadmium (a toxic metal)
8. Chromium (a metallic element)
9. Cumene
10. Ethylene oxide
11. Formaldehyde
12. Nickel (a metallic element)
13. Polonium-210 (a radioactive chemical element)
14. Polycyclic aromatic hydrocarbons (PAHs)
15. Tobacco-specific nitrosamines
16. Vinyl chloride

Toxic Metals

Toxic (heavy) metals are metals and metal compounds that have the potential to harm health when absorbed or inhaled. They're present in the soil and fertilizer used in growing tobacco. In very small amounts, some of these metals support life, but when inhaled in large amounts, they can become toxic. These include:

1. Arsenic- Commonly used in rat poison, it finds its way into tobacco through pesticides used in tobacco farming.
2. Cadmium- This heavy metal is used in batteries. Smokers typically have twice as much cadmium in their bodies as nonsmokers.

Radioactive Toxic Metals

A couple of radioactive, toxic metals in tobacco products carry extra danger for anyone breathing it in. Lead-210 (Pb-210) and polonium-210 (Po-210) are poisonous, radioactive heavy metals present in cigarette smoke as well as smokeless tobacco.

Poisons

Poison is defined as any substance that, when introduced to a living organism, causes severe physical distress or death. Science has discovered approximately 250 poisonous gasses in cigarette smoke. Here are a few you might recognize:

1. Ammonia compounds- Commonly used in cleaning products and fertilizers, ammonia is also used to boost the impact of nicotine in manufactured cigarettes.
2. Carbon monoxide- Present in car exhaust and lethal in large amounts, it's present at high levels in cigarette smoke.

3. Hydrogen cyanide- This was used to kill people in gas chambers during the Holocaust.
4. Nicotine- This poison used in pesticides is the addictive element in cigarettes.

Most of the substances come from the burning tobacco leaves themselves, not from additives included in cigarettes (or other tobacco products).

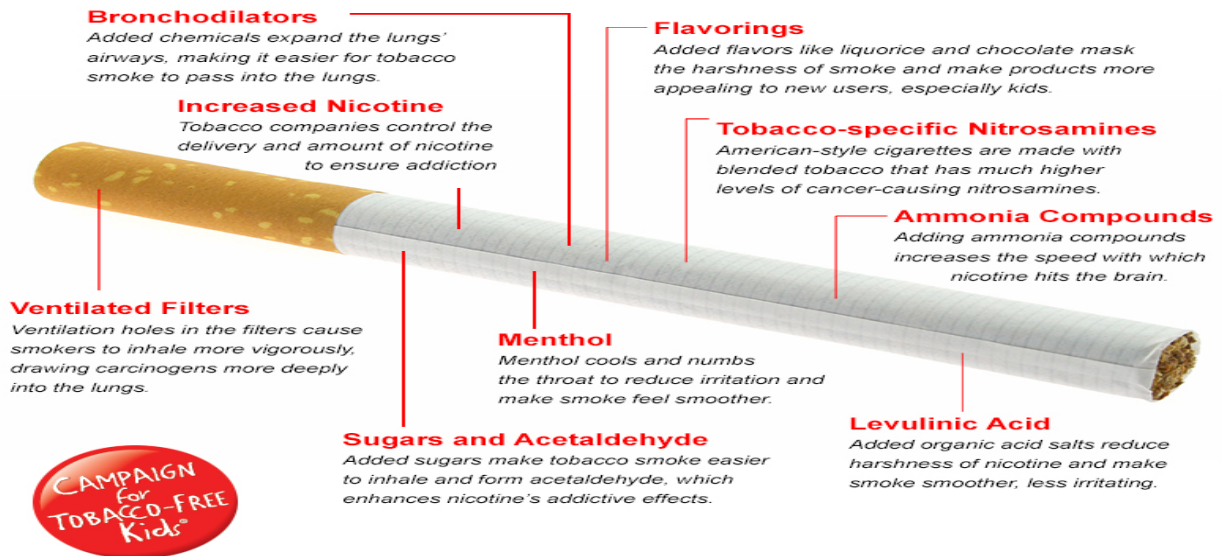
The liquid used in e-cigarettes, commonly known as "e-juice," contains many other flavorings and chemicals such as:

1. Solvent carriers (propylene glycol and glycerol)
2. Tobacco-specific nitrosamines (TSNAs)
3. Aldehydes
4. Metals
5. Volatile organic compounds (VOCs)
6. Phenolic compounds
7. Polycyclic aromatic hydrocarbons (PAHs)
8. Tobacco alkaloids

Beginning in January of 2020, the U.S. FDA banned the sale of prefilled cartridge e-cigarettes in any flavor other than tobacco or menthol, unless officially authorized.

TABLE 1: ADDITIVES IN CIGARETTES

9 Ways Tobacco Companies Make Cigarettes More Addictive, More Attractive to Kids and More Deadly



Barriers to Quitting Tobacco

A study of the homeless population was conducted and these participants were addicted to alcohol and/or other drugs. Barriers common to all vulnerable groups included:

1. stress management
2. lack of support from health and other service providers
3. high prevalence and acceptability of smoking in vulnerable communities

Unique barriers have been identified for those vulnerable people in the following groups:

1. mental illness and substance abuse (maintenance of mental health)
2. low socioeconomic status (less access to financial, educational, social, and health resources)
3. indigenous groups (cultural and historical norms)
4. prisoners (living conditions)
5. people who are homeless (competing priorities)
6. at-risk youth (high accessibility of tobacco)

An individual's health is influenced by factors across many levels, from individual genetic and physical characteristics, social and community networks, to broader influences of culture, socioeconomic determinants, and the environment. This framework has been used to examine the determinants of health inequities.

A number of factors have been identified as barriers to quitting, including:

1. heavier nicotine dependence
2. lower awareness of the harms of smoking
3. being unaware of, or having misconceptions about, available cessation services
4. perceived cost and the time it takes to access nicotine replacement therapy (NRT)
5. financial stress
6. lack of support for quitting among family and friends
7. lower levels of confidence in the ability to stop smoking
8. regarding smoking as their 'only pleasure' and having a role in relieving boredom

Within the general population, cross-sectional studies have found variation in the most commonly reported barriers to cessation. These were the most frequently reported barriers:

1. enjoyment (79%)
2. cravings (75%)
3. stress management (36–63%)

Additional barriers were also identified but were not as common as the above-mentioned barriers.

1. Irritability (39–42%)
2. habit (39%)

3. withdrawal symptoms (28–48%)
4. fear of failure (17–32%)
5. concerns about weight gain (27–34%)

Understanding the perceived barriers to quitting is important in order to better understand tobacco use, relapse, and quitting-related behaviors. Through knowledge of understanding, the appropriate policies can be developed to facilitate the development of effective tailored smoking cessation interventions.

Treatment/Support

The Tips Campaign uses approaches to address health disparities in pursuit of health equity. The CDC site below contains approaches to address health disparities and increases awareness of free quit-smoking resources. Tips on how to stop smoking and individuals that share their true stories about their journey to becoming smoke-free. Tips have helped more than 1 million people stop smoking.

<https://www.cdc.gov/tobacco/campaign/tips/index.html>

Quit smoking medications

1. Nicotine Replacement Therapy (NRT) works by replacing some of the nicotine you used to get from cigarettes, without the hundreds of harmful chemicals in cigarette smoke and helps with that uncomfortable feeling after quitting. There are five different NRTs approved by the U.S. Food and Drug Administration for quitting smoking. Nicotine is the active ingredient in all of them. You can purchase them without a prescription (over-the-counter).
 - a. Nicotine patches
 - b. gum
 - c. lozenges

2. NRTs supply nicotine without the hundreds of harmful chemicals that cigarette smoke contains.
3. NRT helps lessen the uncomfortable feelings that come when you stop getting nicotine from cigarettes.
 - a. When used as directed, most people get enough nicotine from NRT to avoid having overwhelming cravings and withdrawal symptoms.
 - b. However, even using quit-smoking medicine you will likely still have some discomfort and urges to smoke.
4. Using the long-acting patch at the same time as a short-acting NRT, like the lozenge or gum, can help decrease withdrawal even more.
5. You can gradually decrease the amount of nicotine that you get from NRT over several weeks. Your brain will get used to working without so much nicotine. And you will figure out how to get through the day without smoking.
6. Aids to stopping smoking can also be a source of accidental nicotine ingestion. Nicotine "patches" usually contain between 7 and 25 mg, and nicotine gum contains 2 to 4 mg per piece.

There are two quit-smoking medicines approved by the U.S. Food and Drug Administration. These are prescription medications and come in pill form.

1. **Bupropion** has many effects on the brain, including helping people quit smoking. It decreases craving and other nicotine withdrawal symptoms.
2. **Varenicline** has two main effects:
 - a. It mimics some of the effects that nicotine has on parts of your brain, reducing your urge to smoke and some withdrawal symptoms.
 - b. It reduces the enjoyment you get from the nicotine in cigarettes. This can make it easier to quit and continue to not smoke. It does this by attaching strongly to the same parts of your brain that nicotine attaches to, but without stimulating them as strongly as nicotine. This means that nicotine from a cigarette has fewer places to attach because the varenicline is already there.

There are a few important things to remember when taking a quit smoking medication. All quit-smoking medicines increase your chances of quitting successfully. But, you are much more likely to succeed if you also get some help figuring out new ways to get through the day while not smoking. You can get help from a quit coach, your doctor, a website, or a texting program.

Available Resources for Quitting Smoking

1-800-QUITNOW

1. When you call 1-800-QUIT-NOW, you can speak confidentially with a highly trained quit coach.
2. Quitlines provide many of the services and similar support you get in a stop-smoking class or from your doctor and can be a valuable complement to your doctor's care.
3. Quitlines are available throughout the United States.
4. Coaching help is available in several languages.

National Texting Portal

1. Text QUITNOW to 333888

The quitSTART Application

1. Get ready to quit with tips and information to prepare you for becoming smokefree
2. Monitor your progress and earn badges for smoke-free milestones and other achievements
3. Get back on track if you slip and smoke
4. Manage cravings and bad moods in healthy ways
5. Distract yourself from cravings with games and challenges
6. Store helpful tips, inspirations, and challenges in your Quit Kit

7. Share your progress and favorite tips through social media

Social Media



Quit Guide

1. Know your reasons for quitting
2. Make a decision to quit
3. Take steps to quit
4. Build your quit plan

Strategies for Quitting

1. Manage your quiet day
2. Recognize signs of depression
3. Reduce your stress
4. Avoid second-hand smoke

Maintaining your Quit

1. Prevent slips
2. Build a support system
3. Prepare to stay smoke-free
4. Enjoy the benefits of being smoke-free

Know the Common Withdrawal Symptoms

1. Having urges or cravings to smoke

Almost everyone who regularly smokes has cravings or urges to smoke during and after they quit. They may be mild or become overwhelming at times. Learning how to deal with cravings is one of the *most important* things you can do to stay successful.

There are many things a person can do to make urges and cravings less of a problem. Quit-smoking medicines can help tremendously if used appropriately and so can other quitting tips. Cravings can be triggered by thoughts about smoking, those people or locations associated with smoking, or behaviors connected with smoking, like having a cup of coffee. Even a thought or a feeling can trigger a craving. Helpful thoughts about the reasons why quitting is important can help lessen the craving or urge to smoke. Remember that you never have to give in to a craving and that the craving will pass in time.

Tips to manage withdrawal symptoms:

1. Use a quit-smoking medication
2. Keep busy and use distractions
3. Be physically active
4. Spend time with those friends and family who do not smoke

2. Feeling irritated, grouchy, or upset

It is very common to feel irritated or grouchy when stopping smoking. Understanding this is a normal part of the process can be reassuring and can help the person who is attempting to stop smoking manage better.

Understanding that when someone is attempting to quit smoking their body is adjusting to functioning without nicotine, something it has become accustomed to having. Taking a few deep breaths, and remembering why you wanted to quit in the first place will help soften or lessen those feelings of irritation and tension.

3. Feeling jumpy and restless

During the first days or weeks after quitting it is normal to feel jumpy or restless. Quitting smoking can cause emotional symptoms like irritability and feeling grouchy but the body can have physical reactions such as restlessness and jumpiness. Just like your mind gets irritated without nicotine at first, the rest of your body can, too.

Physical activity during this time can help decrease those feelings of jumpiness or restlessness. If experiencing these symptoms, get up and walk or engage in some type of physical activity. Additionally, cutting back on coffee, tea, and other caffeinated drinks which are stimulants could help decrease the feelings of restlessness. When nicotine is removed from the body, caffeine resides longer in the body and can increase those feelings of restlessness and jumpiness.

4. Having a hard time concentrating

In the first days after quitting smoking, the ability to concentrate is more difficult. The best way to manage this is to understand this is common and give yourself some grace. Try to limit activities that require increased concentration if possible.

5. Having trouble sleeping

It's common to have some trouble sleeping when first quitting smoking. This should improve the longer you quit smoking, but if it is bothersome or affecting work or other aspects of life, talk with a healthcare provider for assistance. Lack of sleep will increase the inability to tolerate frustrations and could lead to increased difficulty with quitting smoking.

Ways to manage:

1. When you quit smoking, caffeine lasts longer in your body as mentioned above. Coffee, tea, or other caffeinated drinks should be avoided in the late afternoon and evening to avoid insomnia.
2. If using a nicotine patch, try removing it an hour before bedtime. Sometimes the nicotine in the patch can affect sleep.
3. Utilization of sleep hygiene.
 - a. Don't watch TV or use phones, computers, or e-books in bed.
 - b. The bedroom should be quiet, dark, relaxing, and at a comfortable temperature.
 - c. Don't eat a heavy meal or drink alcohol right before bed.
 - d. Add in some physical activity during the day but avoid it within 1-2 hours of bedtime.
 - e. Attempt to keep a regular sleep cycle. Go to sleep and wake up around the same time each day, even on weekends.

6. Feeling hungrier or gaining weight

It's normal for appetite to increase when quitting smoking because the nicotine in cigarettes suppresses appetite. When you remove the nicotine through smoking cessation appetite could likely increase. Secondly, the use of your hands and mouth have become a habit or routine, and that behavior continues. Food could be a substitute for that motion or behavior. You may also eat more because of the stress of quitting or to have something to do

with your hands and mouth. Food may even be more enjoyable because your senses of smell and taste are no longer being dulled by all the smoke.

While some people may gain weight after they quit, it's important for your health to quit sooner than later. Below are a few simple things you can do to help control weight gain after quitting. The bonus is that these things will help you build healthy behaviors for a lifetime of being smoke-free.

1. Snacks should be healthy, low-calorie foods while giving the mouth and hands something to do. Examples of these would be celery, carrots, or crisp fruits like apples. Other ways of keeping your hands and mouth busy could be chewing sugar-free gum, a toothpick, or a straw.
2. Any physical activity is better than none. Joining a gym, going running, or simply walking can have long-lasting health benefits. Just begin to move.
3. Eating is often something we do in the background while we watch TV or check our phones. This is referred to as unconscious eating and we tend to eat more than what our body needs. When quitting smoking, make a point of removing distractions when eating. Also, try eating slower and focus on the taste and textures of the food. Simply put, enjoy your food. This can help you notice when you are getting full.
4. If you are worried about gaining weight, a quit coach can help you with other quitting tips, or you can talk with your healthcare provider for help.

7. Feeling anxious, sad, or depressed

People who smoke are more likely to suffer from anxiety or depression than people who don't smoke. This may have been the root cause that started their smoking lifestyle. Some people may experience mood changes for a short-time after they quit smoking. Watch for this, especially if you've ever had anxiety or depression.

For some people, smoking may seem like it helps with anxiety or depression, but don't be fooled. Smoking might make you feel better in the short-term, but that's because the nicotine in cigarettes stops the discomfort of withdrawal, *not* because it is helping with anxiety or depression. There are much better ways to deal with withdrawal symptoms and mood changes than returning to smoking. Research has stated that once people have been smoke-free for a few months, their anxiety and depression levels are often lower than when they were smoking.

Below are ways to manage sadness, anxiety, and depression.

1. Being physically active can help lift your mood. It is important to remember to start small and build up over time if you are not a routine exerciser. This can be hard to do if you're feeling down but remind yourself why you want to quit smoking and the health benefits you will gain.
2. Attempt to add structure to your day. Stay busy. Get out of the house if you can.
3. Staying or getting connected with other people. Being in touch or talking with others every day can help your mood. Try to connect with people who are supportive of your efforts to quit smoking or those who do not actively smoke.
4. Do things you enjoy, and reward yourself. Even small things add up and help you feel better.
5. If not feeling better in a couple of weeks, or if the symptoms feel unmanageable, it's important to contact a healthcare provider. There are methods healthcare providers can utilize that may decrease these symptoms.
6. What if feelings of depression get worse, or don't get better? You should get help. Talk to your healthcare provider, call the quitline ([1-800-QUIT-NOW](tel:1800QUITNOW)), or seek appropriate emergency help.
 - a. Sometimes people who are feeling depressed think about hurting themselves or dying. If you or someone you know is having these feelings, get help now.

- b. Call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255), available 24 hours a day, 7 days a week. Or utilize Text telephone devices at TTY: 1-800-799-4889.
- c. Call 911 or go to the nearest hospital emergency department for emergency medical treatment.
- d. Do not be alone. Don't leave another person alone if he or she is in crisis.

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