

25 Questions Answered About Smoking & Your Health

1. Is there a safe way to smoke?

No. All cigarettes can cause damage to the human body and even a small amount is dangerous. Cigarettes are perhaps the only legal product whose advertised and intended use is harmful to the body and is a proven cause of cancer.

Although some people try to make their smoking habit safer by smoking fewer cigarettes, most smokers find that difficult. Some people think that switching from high tar and nicotine cigarettes to those with low tar and nicotine content makes smoking safer, but this is not always true. When people switch to lower tar and nicotine brands, they often smoke more cigarettes or more of each cigarette to get the same nicotine dose as before. A low-tar cigarette can be just as harmful as a high-tar cigarette when a person takes deeper puffs, puffs more frequently, or smokes cigarettes to a lower butt length. Even if smokers who switch to lower tar brands do not make these changes to compensate, the health benefits are insignificant when compared to the benefits of quitting completely.

2. Is cigarette smoking really addictive?

Yes. The nicotine in cigarette smoke is what causes an addiction to smoking. Nicotine is a drug which is addicting just like heroin and cocaine for three main reasons. First, when taken in small amounts, nicotine produces pleasurable feelings that make the smoker want to smoke more. Second, smokers usually become dependent on nicotine and suffer both physical and psychological withdrawal symptoms when they stop smoking. These symptoms include nervousness, headaches, irritability, and difficulty in sleeping. Third, because nicotine affects the chemistry of the brain and central nervous system, it can affect the mood and temperament of the smoker.

3. Who is most likely to become addicted?

Anyone who starts smoking is at risk of becoming addicted to nicotine. Studies show that among addictive behaviors such as the use of alcohol and other drugs, cigarette smoking is most likely to become an established habit during adolescence. Therefore, when young people become cigarette smokers they are more likely to become addicted and more likely to suffer from the variety of health problems caused by cigarette smoking.

4. What does nicotine do?

Nicotine is a poison and taken in large doses could kill a person by paralyzing breathing muscles. Smokers usually take it in small amounts that the body can quickly break down and get rid of, which is why the nicotine does not kill instantly. The first dose of nicotine causes a person to feel awake and alert, while later doses result in a calm, relaxed feeling. Nicotine can make new smokers, and regular smokers who get too much of it, feel dizzy or nauseous. The resting heart rate for young smokers increases 2 to 3 beats per minute. It also lowers skin temperature and reduces blood flow in the legs and feet. Evidence shows that nicotine plays an important role in increasing smokers' risk of heart disease and stroke.

5. Does smoking cause cancer?

Yes. Tobacco smoke contains at least 43 carcinogenic (cancer-causing) substances. Smoking causes many kinds of cancer, not just lung cancer. Tobacco use accounts for 30%, or one in three, of all cancer deaths in the United States. Smoking is responsible for almost 90% of lung cancers among men and more than 70% among women, about 83% overall. Cancer of the mouth, larynx, pharynx, esophagus, kidney, bladder, pancreas, and uterine cervix also have in common cigarette smoking as a major cause.

6. How does cigarette smoke affect the lungs?

Cigarette smoking causes several lung diseases that can be just as dangerous as lung cancer. Chronic bronchitis - a disease where the airways produce excess mucus, which forces the smoker to cough frequently - is a common ailment for smokers. Cigarette smoking is also the major cause of emphysema - a disease that slowly destroys a person's ability to breathe.

In order for oxygen to reach the blood, it must move across large surfaces in the lungs. Normally, thousands of tiny sacs make up about 100 square yards of surface area in the lungs. When emphysema occurs, the walls between the sacs break down and create larger but fewer sacs, significantly decreasing the amount of oxygen reaching the blood. Eventually, the lung surface area can become so small that a person with emphysema has to spend most of the time gasping for breath, with an oxygen bottle near by or with oxygen tubes inserted into the nasal cavity.

Chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema, kills about 81,000 people each year; cigarette smoking is responsible for more than 65,000 of these deaths.

7. What in cigarette smoke is harmful?

Cigarette smoke is a complex mixture of organic and inorganic compounds generated by the combustion (burning) of tobacco and additives. Cigarette smoke contains tar, which is made up of over 4,000 chemicals, including the 43 known to cause cancer. Some of these substances cause heart and respiratory diseases, all of which are disabling and can cause death. You might be surprised to know some of the chemicals found in cigarette smoke. They include: cyanide, benzene, formaldehyde, methanol (wood alcohol), acetylene (the fuel used in torches), and ammonia. It also contains the poisonous gases nitrogen oxide and carbon monoxide. Its main active ingredient is nicotine, an addictive drug.

8. Does cigarette smoking affect the heart?

Yes. Smoking cigarettes increases the risk of heart disease, which is America's number one killer. Almost 180,000 Americans die each year from cardiovascular disease caused by smoking. Smoking, high blood pressure, high blood cholesterol, and lack of exercise are all risk factors for heart disease, but smoking alone doubles the risk of heart disease. Among those who have previously had a heart attack, smokers are more likely than non-smokers to have another.

9. How does smoking affect pregnant women and their babies?

Pregnant women who smoke endanger the health and lives of their unborn babies. Babies of smoking women average 6 ounces less at birth than babies of nonsmoking women. When a pregnant woman smokes, she really is smoking for two because the nicotine, carbon monoxide, and other dangerous chemicals in smoke enter her bloodstream and pass directly into the baby's body. Statistics show a direct relation between smoking during pregnancy and spontaneous abortions, stillbirths, death among newborns, and sudden infant death syndrome (SIDS). Research shows that the risk of SIDS triples for babies of mothers who smoke during pregnancy; two-thirds of SIDS deaths among babies of women who smoked during pregnancy can be attributed to smoking. Mounting evidence in recent years has also made it clear that children of mothers who smoke have higher than normal risks of developing asthma, especially if the mother smokes during pregnancy. Exposure to second-hand smoke also makes a child's asthma more severe than it would be otherwise, and increases the child's risk of pneumonia, bronchitis, and fluid in the middle ear.

10. What are some of the short- and long-term effects of smoking cigarettes?

Smoking causes cancer, which may not develop for years. Regardless of how many smokers are lucky enough to escape cancer, the truth is inescapable: cigarette smokers die younger than nonsmokers. In fact, smoking decreases a person's life expectancy by 10 - 12 years. Smokers between the ages of 35 and 70 have death rates three times higher than

those who have never smoked.

There are many more short-term effects of smoking. A major consequence of smoking is decreased lung function which is why smokers often suffer from shortness of breath, nagging coughing, or tiring easily during strenuous physical activity. Smoking also diminishes the ability to smell and taste and causes premature aging of skin.

11. What are the dangers of environmental tobacco smoke (ETS), or passive smoking, or second-hand smoke?

Passive smoking occurs when nonsmokers inhale the tobacco smoke created by smokers (environmental tobacco smoke). ETS, also known as second-hand smoke, includes mainstream smoke, which is smoke drawn through the mouthpiece of a cigarette, pipe, or cigar that is then exhaled into the air by smokers, and side stream smoke, the smoke that comes directly from the burning tobacco before it reaches the smoker. ETS contains the same harmful chemicals as the smoke that smokers inhale. In fact, because side stream smoke is formed at lower temperatures, it gives off even larger amounts of cancer-causing substances. At least 43 of the chemicals taken in by those breathing ETS are known cancer-causing substances, and ETS is now classified by the US Environmental Protection Agency (EPA) as a Group A carcinogen (known to cause cancer in humans).

ETS causes lung cancer in healthy nonsmokers. A nonsmoker who is married to a smoker has a 30% greater risk of developing lung cancer than a nonsmoker living with a nonsmoker. Children whose parents smoke are more likely to suffer from pneumonia or bronchitis in the first two years of life than children who live in smoke-free households. Several studies have also established a link between parental smoking and the occurrence of sudden infant death syndrome (SIDS). Children of parents who smoke have a twofold increased risk of dying of SIDS. Mounting evidence in recent years has also made it clear that children of mothers who smoke have higher than normal risks of developing asthma, especially if the mother smokes during pregnancy. It is well known that second-hand smoke also makes a child's asthma more severe than it would be otherwise, and increases the child's risk of pneumonia, bronchitis, and fluid in the middle ear.

ETS can also affect nonsmokers by causing eye irritation, headaches, nausea, and dizziness.

12. Is smoking common among young people?

Yes. Tobacco use, including smoking cigarettes, chewing tobacco, and dipping snuff, remains common among American youth. About 35 percent of high school students and about 13 percent of middle school students surveyed in 1998 and 1999 reported being users of some form of tobacco, with about 8 percent reporting they smoked their first

cigarette before age 11. About 80 percent of adult smokers started smoking when they were 17 or younger.

Cigarettes are the most common form of tobacco used by young people, with 9.2 percent of middle school students and 28.5 percent of high school students reporting being current cigarette smokers. Among different ethnic groups, whites are more commonly cigarette smokers or users of smokeless tobacco than blacks or Hispanics in high school, with less difference among the groups in middle school.

Cigars are the second most common form of tobacco use among young people, with 6.1 percent of middle school students and 15.3 percent of high school students reporting current use of cigars (one or more in the 30 days prior to the survey). Blacks are more likely to smoke cigars in middle school than are whites.

Smokeless tobacco is the third most common tobacco product used by young people, with 2.7 percent of middle school students and 6.6 percent of high school students reporting current use. More whites (about 9 percent) use smokeless tobacco in high school than blacks (2.4 percent) or Hispanics (about 4 percent).

In both middle school and high school, boys were significantly more likely to smoke cigars or use smokeless tobacco than girls.

The 1998-1999 report shows that many non-smoking young people are exposed to environmental tobacco smoke from those around them. In the week just before being surveyed, approximately half the nonsmoking students surveyed were in the same room as someone smoking, and almost one-third rode in a car in which someone was smoking. About 80 percent of all young persons believe smoke from others is harmful to them.

Each day, approximately 6,000 young persons try a cigarette and approximately 3,000 become daily smokers. In 1997, regular smokers between 12 and 17 smoked over 900 million packs of cigarettes. If current patterns of smoking behavior persist, an estimated 5 million American young people 17 and younger in the year 2000 could die prematurely in future years from smoking-related illnesses. These projected patterns of smoking and smoking-related deaths could result in an estimated \$200 billion (in 1993 dollars) in future health-care costs and approximately 64 million years of potential life lost.

Statistics also show that students who use other drugs, get in fights, carry weapons, attempt suicide, and engage in high-risk sexual behaviors are more likely to smoke

13. What are the chances that smoking will kill you?

About four million people die worldwide each year as a result of smoking. In the United

States, tobacco use is responsible for nearly one in five deaths, killing more than 400,000 Americans each year. This is more than the number of people who would die every year if three jumbo jets crashed each day with no survivors. Smoking is the single most preventable cause of death in our society. Statistically, smokers die 10 - 12 years younger than non-smokers.

14. How many people smoke cigarettes?

In 1998, the latest year for which figures are available, 24.1% of adults --about 48 million people--smoked cigarettes. Approximately 26% of men and 22% of women reported being smokers in 1998, reflecting a continuing decline in the percentage of Americans who smoke. African-Americans smoke about the same as whites, 24% and 25%, respectively. Ethnic groups with the lowest smoking rates are Hispanics (19.1%) and Asians/Pacific Islanders (13.7%). Education level seems to affect smoking rates as shown by a consistent decrease in the smoking rate in groups with a higher level of education. About 37% of those with less than a high school education smoke, while only about 11% of those with a college education or more smoke.

15. Why do people begin to smoke?

Most people begin smoking between the ages of 10 and 18. Peer pressure and curiosity are the major influences that encourage them to experiment with smoking. Also, people with parents who smoke are more likely to begin smoking than those who have nonsmoking parents. Those who begin to smoke at a younger age are more likely than late starters to develop long-term nicotine addiction.

Another prevalent influence in our society is the tobacco industry's advertisements for its products. The tobacco industry spends nearly \$6 billion annually to develop and market ads that depict smoking as an exciting, glamorous, healthy adult activity.

16. Can quitting really help a lifelong smoker?

Yes. It is never too late to quit. The sooner smokers quit, the more they can reduce their chances of getting cancer and other diseases. Within 20 minutes of smoking the last cigarette, the body begins a series of regenerating changes. After 20 minutes, blood pressure drops to normal. After 8 hours, the carbon monoxide level in the blood drops to normal. After 24 hours, the chance of heart attack decreases. After one year, the risk of coronary heart disease is half that of a smoker. In 1 to 9 months, coughing, sinus congestion, fatigue, and shortness of breath decrease and cilia regrow in the lungs. After 10 years, the lung cancer death rate decreases by almost half. After 15 years, the risk of coronary heart disease is that of a non-smoker. It is important to note that the extent to which these risks fall depends on the total amount the person smoked, the age the person

started smoking, and the amount of inhalation.

17. If you smoke but don't inhale, is there any danger?

Yes. Wherever smoke touches living cells, it does harm. Even if smokers don't inhale - including pipe and cigar smokers - they are at an increased risk for lip, mouth, and tongue cancers. Because it is virtually impossible to avoid inhaling smoke totally, these smokers are also increasing their risk of getting lung cancer.

18. Suppose I smoke for a while and then quit?

Smoking begins to cause damage right away and is highly addictive. Several studies have found nicotine to be as addictive as heroin, cocaine, or alcohol; it is the most common form of drug addiction in the United States. Therefore, it is obviously better never to start smoking cigarettes and become addicted to nicotine than it is to smoke with the intention of quitting later. And like alcohol, heroin, and cocaine, nicotine creates a permanent tolerance in the body. When an ex-smoker smokes a cigarette, even years after quitting, the nicotine reaction may be triggered, quickly hooking the person on the old habit.

19. How do people successfully quit?

There is no one right way to quit. Successful cessation may include one or a combination of methods including using step-by-step manuals, attending self- help classes or counseling, or using a nicotine replacement therapy (nicotine patch or nicotine gum). Anything that is legal, ethical, and effective is worth trying; this could include chewing sugarless gum, eating carrot sticks, hiding ashtrays, taking long walks, asking others not to smoke around you, and spending time in places where smoking is prohibited.

Each year about 17 million people try to quit for at least a day during the American Cancer Society's Great American Smokeout. Of these quitters, more than 4 million still aren't smoking after three months. About 90% of those who have tried to quit have done so on their own by either stopping "cold turkey" or using other methods. Cigarette smoking in adults dropped from 42% in 1965 to 25% in 1995, to 24.1% in 1998.

20. What is nicotine replacement therapy?

Nicotine replacement therapies are medications that provide nicotine without the other harmful components of cigarette smoke. To be most effective, nicotine replacement therapy should be used with a cessation program that addresses a person's psychological dependence on smoking. By chewing gum containing nicotine or wearing a transdermal patch from which the skin absorbs nicotine, a smoker's withdrawal symptoms are significantly decreased or eliminated.

Not everyone can use nicotine replacement therapy. People with certain medical conditions and pregnant women should not use it. When using the patch, it is very important that users do not smoke cigarettes or use tobacco in any form.

21. Why do smokers have "smoker's cough"?

Cigarette smoke contains chemicals that irritate the air passages and lungs. When a smoker inhales these substances, the body tries to protect itself by coughing. The well-known "early morning" cough of smokers happens for a different reason. Normally, cilia (tiny hairlike formations lining the airways) beat outward and sweep harmful material out of the lungs. Cigarette smoke, however, decreases the sweeping action, so some of the poisons in the smoke remain in the lungs. When a smoker sleeps, some cilia recover and begin working again. After waking up, the smoker coughs because the lungs are trying to clear away the poisons that built up the previous day. Unfortunately, prolonged exposure to smoke completely destroys the cilia's ability to function. Then the smoker's lungs are even more exposed and susceptible than before, especially to bacteria and viruses in the air.

22. Are chewing tobacco and snuff safe alternatives to cigarette smoking?

No. Smokeless tobacco contains nicotine, the same addictive drug found in cigarettes. Snuff dippers consume on average more than 10 times the amount of cancer-causing substances (nitrosamines) than cigarette smokers. In fact, some brands of smokeless tobacco contain as much as 20,000 times the legal limit of nitrosamines permitted in certain foods and consumer products, such as beer, bacon, and baby bottle nipples.

The juice from the smokeless tobacco is absorbed directly through the lining of the mouth. This creates sores and white patches which often lead to cancer of the mouth. Smokeless tobacco users greatly increase their risk of other cancers including gum, pharynx, larynx, and esophagus. Other consequences of smokeless tobacco use include halitosis (chronic bad breath), discoloration of teeth and fillings, gum disease, and tooth loss.

Since nearly 25% of adult smokeless tobacco users also smoke cigarettes, their risks of developing cancer is higher.

23. What are the health risks of smoking pipes or cigars?

Smoking cigars or pipes alone is not a healthy alternative to smoking cigarettes. The risk for lung cancer is higher among smokers who smoke cigarettes and cigars or pipes, and for smokers who switch to cigars or pipes after years of cigarette smoking.

Overall cancer deaths among men who smoke cigars are 34% higher than among nonsmokers. Cigars and pipes also release ETS, which is harmful to anyone who breathes it.

More information on the health risks of smoking cigars is available in a separate essay entitled Cigar Smoking and Cancer.

24. How does tobacco use affect the economy?

The tobacco industry is one of the most profitable businesses in the country; in 1998 tobacco manufacturers' revenue was \$50 billion. Nevertheless, the costs of smoking are far higher than the income from cigarette sales. Medical costs alone caused directly by smoking total between \$50 billion and \$73 billion each year. Lost economic productivity caused by smoking also costs the US economy more than \$50 billion each year. This totals more than \$100 billion lost each year to health care costs and lost productivity due to smoking.

Of course these numbers represent only the financial costs. No statistic can express the devastation of pain and suffering caused by cigarette smoking.

25. Are menthol cigarettes safer than other brands?

Menthol cigarettes are not safer than other brands and may even be more dangerous. About 28% of all cigarettes sold in the United States are menthol. About 76% of African American cigarette smokers smoke menthol cigarettes as compared to 23% of whites. These brands contain enough menthol to produce a cool sensation in the throat when smoke is inhaled. People who smoke menthol cigarettes can inhale more deeply or hold the smoke inside longer than smokers of non-menthol cigarettes. This may explain why African Americans, who statistically smoke fewer cigarettes a day (but more menthol cigarettes), are more likely than whites to die from smoking-related diseases like lung cancer, heart disease, and stroke.

Where Can I Go for Additional Help?

It is hard to fight any addiction, and smoking is no different. But you can quit! More than 40 million Americans have successfully quit smoking. Call the human resources office where you work; many companies have information about employee cessation programs. A variety of organizations offer information on how to quit and where to go for help.

If you want to quit smoking and need help, talk with your health care provider and contact one of the following organizations. They can provide you with current information, advice, and suggestions for beginning the end of your tobacco use.

American Cancer Society
Telephone: 1-800-ACS-2345
Internet: www.cancer.org

American College of Obstetricians & Gynecologists
Telephone: 202-638-5577
Internet Address: www.acog.org

American Heart Association
Telephone Number: 800-242-1793 (call center) or 800-242-1793 or 214-373-6300
(administrative offices)
Internet Address: www.amhrt.org

American Lung Association
Telephone: (800) 586-4872 or 212-315-8700
Internet Address: www.lungusa.org

National Cancer Institute
Cancer Information Service
Telephone: 800-4-CANCER or 800-422-6237
Internet Address: www.nci.nih.gov

National Women's Health Information Center (NWHIC)
Telephone: 800-994-WOMAN or 800-994-9662
Internet Address: www.4woman.org

Nicotine Anonymous
Telephone: 415-750-0328
Internet Address: www.nicotine-anonymous.org

Office on Smoking & Health
National Center for Disease Prevention and Health Promotion
Telephone: 770-448-5705
Internet Address: www.cdc.gov/tobacco

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