Guide to Quit Smoking



Quitting smoking is not easy, but you can do it. To have the best chance of quitting and staying quit, you need to know what you're up against, what your options are, and where to go for help. You'll find this information here. Click on the topics below to get started.

1. What do I need to know about quitting?

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The US Surgeon General has said, "Smoking cessation (stopping smoking) represents the single most important step that smokers can take to enhance the length and quality of their lives."

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Why is it so hard to quit smoking?

Mark Twain said, "Quitting smoking is easy. I've done it a thousand times." Maybe you've tried to quit, too. Why is quitting and staying quit hard for so many people? The answer is nicotine.

Nicotine

Nicotine is a drug found naturally in tobacco. It is as addictive as heroin or cocaine. Over time, a person becomes physically and emotionally addicted to (dependent on) nicotine. Studies have shown that smokers must deal with both the physical and psychological (mental) dependence to quit and stay quit.

How nicotine gets in, where it goes, and how long it stays?

When you inhale smoke, nicotine is carried deep into your lungs. There it is quickly absorbed into the bloodstream and carried throughout your body. Nicotine affects many parts of the body, including your heart and blood vessels, your hormones, the way your body uses food (your metabolism), and your brain. Nicotine can be found in breast milk and even in mucus from the cervix of a female smoker. During pregnancy, nicotine freely crosses the placenta and has been found in amniotic fluid and the umbilical cord blood of newborn infants.

Different factors affect how long it takes the body to remove nicotine and its byproducts. In most cases, regular smokers will still have nicotine or its by-products, such as cotinine, in their bodies for about 3 to 4 days after stopping.

How nicotine hooks smokers?

Nicotine causes pleasant feelings that make the smoker want to smoke more. It also acts as a kind of depressant by interfering with the flow of information between nerve cells. Smokers tend to increase the number of cigarettes they smoke as the nervous system adapts to nicotine. This, in turn, increases the amount of nicotine in the smoker's blood. In fact, nicotine inhaled in cigarette smoke reaches the brain faster than drugs that enter the body through a vein (intravenously or IV).

After a while, the smoker develops a tolerance to the drug. Tolerance means that it takes more nicotine to get the same effect that the smoker used to get from smaller amounts. This leads to an increase in smoking over time. The smoker reaches a certain nicotine level and then keeps smoking to maintain this level of nicotine.

Nicotine withdrawal symptoms can lead quitters back to smoking

When smokers try to cut back or quit, the lack of nicotine leads to withdrawal symptoms. Withdrawal is both physical and mental. Physically, the body reacts to the absence of nicotine. Mentally, the smoker is faced with giving up a habit, which calls for a major change in behavior. Both the physical and mental factors must be addressed for the quitting process to work.

Those who have smoked regularly for a few weeks or longer, and suddenly stop using tobacco or greatly reduce the amount smoked, will have withdrawal symptoms. Symptoms usually start within a few hours of the last cigarette 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 for a few days to up to several weeks. They will get better every day that you stay smoke-free.

Withdrawal symptoms can include any of the following:

- Dizziness (which may only last 1 to 2 days after quitting)
- Depression
- Feelings of frustration, impatience, and anger
- Anxiety
- Irritability
- Sleep disturbances, including having trouble falling asleep and staying asleep, and having bad dreams or even nightmares

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

These symptoms can lead the smoker to start smoking cigarettes again to boost blood levels of nicotine back to a level where there are no symptoms. (For information on coping with withdrawal, see the section, "How to quit.")

Smoking also makes your body get rid of some drugs faster than usual. When you quit smoking, it may change the way your body handles medicines. Ask your doctor if any medicines you take regularly need to be checked or changed after you quit.

2. Why should I quit?

Your Health

Health concerns usually top the list of reasons people give for quitting smoking. This is a very real concern: Half of all smokers who keep smoking will end up dying from a smoking-related illness. In the US alone, smoking is responsible for nearly 1 in 5 deaths, and about 8.6 million people suffer from smoking-related lung and heart diseases.

Cancer

Nearly everyone knows that smoking can cause lung cancer, but few people realize it is also a risk factor for many other kinds of cancer too, including cancer of the mouth, voice box (larynx), throat (pharynx), esophagus, bladder, kidney, pancreas, cervix, stomach, and some leukemias.

Lung diseases

Pneumonia is included in the list of diseases known to be caused by smoking. Smoking also increases your risk of getting lung diseases like emphysema and chronic bronchitis. These diseases are grouped together under the term COPD (chronic obstructive pulmonary disease). COPD causes on-going (chronic) illness and disability, and worsens over time -- sometimes becoming fatal. Emphysema and chronic bronchitis can be found in people as young as 40, but are usually found later in life, when the symptoms get much worse. Long-term smokers have the highest risk of developing severe COPD.

Heart attacks, strokes, and blood vessel diseases

Smokers are twice as likely to die from heart attacks as are non-smokers. And smoking is a major risk factor for peripheral vascular disease, a narrowing of the blood vessels that carry blood to the leg and arm muscles. Smoking also affects the walls of the vessels that carry blood to the brain (carotid arteries), which can cause strokes. Men who smoke are more likely to develop erectile dysfunction (impotence) because of blood vessel disease.

Blindness and other problems

Smoking causes an increased risk of macular degeneration, one of the most common causes of blindness in older people. It also causes premature wrinkling of the skin, bad breath, gum and tooth problems, bad-smelling clothes and hair, yellow fingernails.

Special risks to women and babies

Women have some unique risks linked to smoking. Women over 35 who smoke and use birth control pills have a higher risk of heart attack, stroke, and blood clots of the legs. Women who smoke are more likely to miscarry (lose the baby) or have a lower birth-weight baby. And low birth-weight babies are more likely to die, or have learning and physical problems.

Years of life lost due to smoking

Based on data collected in the late 1990s, the US Centers for Disease Control and Prevention (CDC) estimated that adult male smokers lost an average of 13.2 years of life and female smokers lost 14.5 years of life because of smoking. And given the diseases that smoking can cause, it can steal your quality of life long before you die. Smoking-related illness can limit your activities by making it harder to breathe, get around, work, or play.

Why quit now?

No matter how old you are or how long you've smoked, quitting can help you live longer and be healthier. People who stop smoking before age 50 cut their risk of dying in the next 15 years in half compared with those who keep smoking. Ex-smokers enjoy a higher quality of life with fewer illnesses from cold and flu viruses, better self-reported health, and reduced rates of bronchitis and pneumonia.

For decades the Surgeon General has reported the health risks linked to smoking. In 1990, the Surgeon General concluded:

- Quitting smoking has major and immediate health benefits for men and women of all ages. These benefits apply to people who already have smoking-related disease and those who don't.
- Ex-smokers live longer than people who keep smoking.
- Quitting smoking lowers the risk of lung cancer, other cancers, heart attack, stroke, and chronic lung disease.
- Women who stop smoking before pregnancy or during the first 3 to 4 months of pregnancy reduce their risk of having a low birth-weight baby to that of women who never smoked.
- The health benefits of quitting smoking are far greater than any risks from the small weight gain (usually less than 10 pounds) or any emotional or psychological problems that may follow quitting.

3. When smokers quit -- What are the benefits over time?

20 minutes after quitting: Your heart rate and blood pressure drops. (Mahmud A, Feely J. Effect of Smoking on Arterial Stiffness and Pulse Pressure Amplification. *Hypertension*. 2003;41:183.)

12 hours after quitting: The carbon monoxide level in your blood drops to normal. (US Surgeon General's Report, 1988, p. 202)

2 weeks to 3 months after quitting: Your circulation improves and your lung function increases.

(US Surgeon General's Report, 1990, pp. 193, 194, 196, 285, 323)

1 to 9 months after quitting: Coughing and shortness of breath decrease; cilia (tiny hair-like structures that move mucus out of the lungs) regain normal function in the lungs, increasing the ability to handle mucus, clean the lungs, and reduce the risk of infection.

(US Surgeon General's Report, 1990, pp. 285-287, 304)

1 year after quitting: The excess risk of coronary heart disease is half that of a smoker's.

(US Surgeon General's Report, 1990, p. vi)

5 years after quitting: Your stroke risk is reduced to that of a non-smoker 5 to 15 years after quitting.

(US Surgeon General's Report, 1990, p. vi)

10 years after quitting: The lung cancer death rate is about half that of a person who continues smoking. The risk of cancer of the mouth, throat, esophagus, bladder, cervix, and pancreas decrease, too.

(US Surgeon General's Report, 1990, pp. vi, 131, 148, 152, 155, 164, 166)

15 years after quitting: The risk of coronary heart disease is the same as a non-smoker's.

(US Surgeon General's Report, 1990, p. vi)

4. Immediate rewards of quitting

Kicking the tobacco habit offers some benefits that you'll notice right away and some that will develop over time. These rewards can improve your day-to-day life a great deal:

- Your breath smells better
- Stained teeth get whiter
- Bad smelling clothes and hair go away
- Your yellow fingers and fingernails disappear
- Food tastes better
- Your sense of smell returns to normal
- Everyday activities no longer leave you out of breath (such as climbing stairs or light housework)

5. Cost

The prospect of better health is a major reason for quitting, but there are other reasons, too.

Smoking is expensive. It isn't hard to figure out how much you spend on smoking: multiply how much money you spend on tobacco every day by 365 (days per year). The amount may surprise you. Now multiply that by the number of years you have been using tobacco and that amount will probably shock you.

Multiply the cost per year by 10 (for the next 10 years) and ask yourself what you would rather do with that much money.

And this doesn't include other possible costs, such as higher costs for health and life insurance, and likely health care costs due to tobacco-related problems.

6. Social acceptance

Smoking is less socially acceptable now than ever.

Today, almost all workplaces have some type of smoking rules. Some employers even prefer to hire non-smokers. Studies show smoking employees cost businesses more because they are out sick more. Employees who are ill more often than others can raise an employer's need for costly short-term replacement workers. They can increase insurance costs both for other employees and for the employer, who often pays part of the workers' insurance premiums. Smokers in a building also can increase the maintenance costs of keeping odors down, since residue from cigarette smoke clings to carpets, drapes, and other fabrics.

Landlords may choose not to rent to smokers since maintenance costs and insurance rates may rise when smokers live in buildings.

Friends may ask you not to smoke in their homes or cars. Public buildings, concerts, and even sporting events are largely smoke-free. And more and more communities are restricting smoking in all public places, including restaurants and bars. Like it or not, finding a place to smoke can be a hassle.

Smokers may also find their prospects for dating or romantic involvement, including marriage, are largely limited to other smokers, who make up less than 21% of the adult population.

7. Health of others

Smoking not only harms your health but it hurts the health of those around you. Exposure to secondhand smoke (also called environmental tobacco smoke or passive smoking) includes exhaled smoke as well as smoke from burning cigarettes.

Studies have shown that secondhand smoke causes thousands of deaths each year from lung cancer and heart disease in healthy non-smokers.

If a mother smokes, there is a higher risk of her baby developing asthma in childhood, especially if she smoked while she was pregnant. Smoking is also linked to sudden infant death syndrome (SIDS) and low-birth weight infants. Babies and children raised in a household where there is smoking have more ear infections, colds, bronchitis, and other lung and breathing problems than children in non-smoking families. Secondhand smoke can also cause eye irritation, headaches, nausea, and dizziness.

8. Setting an example

If you have children, you probably want to set a good example for them. When asked, nearly all smokers say they don't want their children to smoke. But children whose parents smoke are more likely to start smoking themselves. You can become a good role model for them by quitting now.

9. Help with the mental part of addiction

There are a wide range of counseling services, self-help materials, and medicines available today, so smokers have more tools than ever to help them quit smoking for good.

Some people are able to quit on their own, without the help of others or the use of medicines. But for many smokers, it can be hard to break the social and emotional ties to smoking while getting over nicotine withdrawal symptoms at the same time. Fortunately, there are many sources of support out there -- both formal and informal.

Telephone-based help to stop smoking

As of 2009, all 50 states and the District of Columbia run some type of free telephonebased program that links callers with trained counselors. These specialists help plan a quit method that fits each person's unique smoking pattern. People who use telephone counseling are twice as likely to stop smoking as those who don't get this type of help. Help from a counselor can keep quitters from making many common mistakes.

Telephone counseling is also easier to use than some other support programs. It doesn't require driving, transportation, or child care, and it's available nights and weekends.

Counselors may suggest a combination of methods including medicines, local classes, self-help brochures, and/or a network of family and friends.

Call us to get help finding a phone counseling program in your area.

Support of family, friends, and quit programs

Many former smokers say a support network of family and friends was very important during their quit attempt. Other people who may offer support and encouragement are co-workers and your family doctor. Try to spend time with non-smokers and ex-smokers who support your efforts to quit.

Members of support groups for quitters can be helpful, too. Nicotine Anonymous, for instance, is an open support group that offers a way to find others who are quitting tobacco. It also offers a long-term approach to quitting. (See the "Additional resources" section for contact information.) But it is only one of many types of support groups. Check with your employer, health insurance company, or local hospital to find support groups. Or call the American Cancer Society at 1-800-227-2345.

What to look for in a stop smoking program

Stop smoking programs are designed to help smokers recognize and cope with problems that come up during quitting. They also provide support and encouragement in staying quit. Studies have shown that the best programs will include either one-on-one or group counseling. There is a strong link between how often and how long counseling lasts (its intensity) and the success rate. Overall, the more intense the program, the greater the chance of success.

For example, intensity may be increased by having more or longer sessions or by increasing the number of weeks over which the sessions are given. So when looking for programs, try and find one that has the following:

- Each session lasts at least 15 to 30 minutes
- There are at least 4 sessions
- The program lasts at least 2 weeks -- longer is usually better

Make sure the leader of the group has training in smoking cessation.

Some communities have a Nicotine Anonymous group that holds regular meetings. This group applies the 12-step program of Alcoholics Anonymous (AA) to the addiction of smoking. This may include admitting you are powerless over your addiction to nicotine and having a sponsor to talk with when you are tempted to smoke. These meetings are free, but most will take donations.

Often your local American Cancer Society, American Lung Association, or your local health department will sponsor quit smoking classes, too. Call us for more information.

There are also some programs to watch out for. Not all programs are ethical. Think twice about any programs that:

- Promise instant, easy success with no effort on your part
- Use shots (injections) or pills, especially "secret" ingredients
- Charge a very high fee -- check with the Better Business Bureau if you have doubts
- Are not willing to give you references from people who have used the program

10. Help with the physical part of addiction: Nicotine replacement therapy

Remember, tobacco addiction is both mental and physical. For most people, the best way to quit will be some combination of medicine, a method to change personal habits, and emotional support.

As mentioned earlier, the nicotine in cigarettes leads to actual physical dependence. This can cause unpleasant symptoms when a person tries to quit. Nicotine replacement therapy (NRT) gives you nicotine -- in the form of gums, patches, sprays, inhalers, or lozenges -- but not the other harmful chemicals in tobacco. It can help relieve some of the withdrawal symptoms so that you can focus on the psychological (emotional) aspects of quitting.

How nicotine replacement works

Nicotine replacement therapy (NRT) can help with the difficult withdrawal symptoms and cravings that 70% to 90% of smokers say is their only reason for not giving up cigarettes. Using NRT reduces a smoker's withdrawal symptoms.

Many smokers can quit smoking without using NRT, but most of those who attempt quitting cannot do it on the first try. In fact, smokers usually need many tries -- sometimes as many as 8 to 10 -- before they are able to quit for good.

Lack of success is often related to the onset of withdrawal symptoms. And most quitters go back to smoking within the first 3 months of quitting. So don't be discouraged if you start smoking again. Just try to stop again and make your attempt more successful by adding another method or technique to help you quit. You can reduce withdrawal symptoms with NRT and reduce their impact with support techniques. This gives you a better chance of quitting and staying quit.

Getting the most from nicotine replacement

Nicotine replacement therapy (NRT) only deals with the physical addiction. It is not meant to be the only method used to help you quit smoking. You should combine it with other smoking cessation methods that help the psychological (emotional and habitual) part of smoking, such as a stop smoking program. Studies have shown that this approach -- pairing NRT with a program that helps to change behavior -- can double your chances of quitting and staying quit.

The US Agency for Healthcare Research and Quality (AHRQ) Clinical Practice Guideline on Smoking Cessation in 2000 recommended NRT for all adult smokers except pregnant women and people with heart or circulatory diseases. But more recent data suggest that NRT (specifically the nicotine patch) can be used safely under a doctor's careful monitoring, even in people who have heart or blood vessel (cardiovascular) disease. These studies have found the benefits of quitting smoking outweigh the risks of NRT in people with cardiovascular disease. When looking at these situations, the benefits of quitting smoking must outweigh the potential health risks of NRT for each person. As of mid-2009 there is still not enough good evidence one way or the other to know if NRT is safe in pregnant women. One 2009 US study found that NRT use during pregnancy led to a higher risk of low birth weight babies and pre-term birth. Of course, these are just some of the risks to the baby if a woman smokes while pregnant. Clearly it is best to quit smoking before getting pregnant, but quitting in early pregnancy can still greatly reduce the risks to the baby. Pregnant smokers should talk with their doctors to get help in choosing the best way for them to quit smoking.

The best time to start NRT is when you first quit. Many smokers ask if it's OK to start a program of NRT while they are still smoking. At this time the companies that make NRT products say that they should not be used if you are still smoking. There is some research being done with smokers using NRT while still smoking, but it is still too early to tell if this is dangerous to your health. The most important thing is to make sure that you are not overdosing on nicotine, which can affect your heart and blood circulation. It is safest to be under a doctor's care if you wish to try smoking and using NRT while you are tapering down your cigarette use.

Often smokers first try to quit on their own then decide to try NRT a day or more into quitting. This method does not give you the greatest chance of success, but do not let this discourage you. There are still many options available for quitting smoking and staying quit.

Note that NRT has not yet been proven to help people who smoke fewer than 10 cigarettes per day. You may want to talk with your doctor about a lower dose of NRT if you smoke less than half a pack per day but feel you need nicotine replacement.

When may I begin using nicotine replacement therapy?

You may start using NRT as soon as you throw away that last cigarette. You do not need to wait a certain length of time to put on the patch or start using the gum, lozenge, nasal spray, or inhaler. You should double-check this information with the instructions on your chosen method of nicotine replacement, but in general there is no need to wait to start using NRT.

How do I know if I'm a light, average, or heavy smoker?

Some NRT products make their recommendations based on what kind of smoker you are. But there is no formal category in any textbook or a group that defines a light, average, or heavy smoker. In general, a light smoker is someone who smokes less than 10 cigarettes per day. Someone who smokes a pack a day or more is a heavy smoker. An average smoker falls in between.

Sometimes a doctor will use the term *pack year* to describe how long and how much a person has smoked. A pack year is defined as the number of packs of cigarettes a person has smoked every day multiplied by the number of years he or she has smoked. Since 1 pack is 20 cigarettes, a person who has smoked 20 cigarettes a day for a year is considered to have smoked 1 pack year. Someone who has smoked 30 cigarettes a day ($1\frac{1}{2}$ packs) for 3 years has smoked 4.5 pack years ($1\frac{1}{2}$ x 3), and so on. This is just another way to figure out how high your risk of smoking-related disease might be.

11. What are the types of nicotine replacement therapy?

The Food and Drug Administration (FDA) has approved 5 types of nicotine replacement therapy:

- Patch
- Gum
- Nasal spray
- Inhalers
- Lozenges

Nicotine patches (transdermal nicotine systems): Patches give a measured dose of nicotine through the skin. You are weaned off nicotine by switching to lower-dose patches over a course of weeks. Patches can be bought with or without a prescription. Many types and different strengths are available. Package inserts describe how to use the product, and list special considerations and possible side effects.

The 16-hour patch works well if you are a light-to-average smoker. It is less likely to cause side effects like skin irritation, racing heartbeat, sleep problems, and headache. But it does not deliver nicotine during the night, so it may not be right for those with early morning withdrawal symptoms.

The 24-hour patch provides a steady dose of nicotine, avoiding peaks and valleys. It helps with early morning withdrawal. But there may be more side effects like disrupted sleep patterns and skin irritation.

Depending on body size, most smokers should start using a full-strength patch (15-22 mg of nicotine) daily for 4 weeks, and then use a weaker patch (5-14 mg of nicotine) for another 4 weeks. The patch should be put on in the morning on a clean, dry area of the skin without much hair. It should be placed below the neck and above the waist -- for example, on the upper arm or chest. The FDA recommends using the patch for a total of 3 to 5 months.

Side effects are related to:

- The dose of nicotine
- The brand of patch
- Skin characteristics (such as the person's tendency to have a skin reaction to the patch)
- How long the patch is used
- How it is applied

Some possible side effects of the nicotine patch include:

- Skin irritation -- redness and itching
- Dizziness
- Racing heartbeat
- Sleep problems or unusual dreams
- Headache
- Nausea
- Vomiting
- Muscle aches and stiffness

What to do about side effects:

- Do not smoke while you are using a patch.
- Try a different brand of patch if your skin becomes irritated.
- Reduce the amount of nicotine by using a lower-dose patch.
- Sleep problems may be short-term and go away in 3 or 4 days. If not, and you're using a 24-hour patch, try switching to a 16-hour patch.
- Stop using the patch and try a different form of NRT.

Nicotine gum (nicotine polacrilex): Nicotine gum is a fast-acting form of replacement in which nicotine is taken in through the mucous membrane of the mouth. You can buy it over the counter without a prescription. It comes in 2 mg and 4 mg strengths.

For best results, follow the instructions on the package insert. Chew the gum slowly until you note a peppery taste. Then "park" it inside your cheek, chewing it and parking it off and on for about 20 to 30 minutes. Food and drink can affect how well the nicotine is

absorbed. You should avoid acidic foods and drinks such as coffee, juices, and soft drinks for at least 15 minutes before and during gum use.

If you smoke a pack or more per day, smoke within 30 minutes of waking up, or have trouble not smoking in restricted areas, you may need to start with the higher dose (4 mg). Chew no more than 20 pieces of gum in one day. Nicotine gum is usually recommended for 1 to 3 months, with the maximum being 6 months. Tapering the amount of gum chewed may help you stop using it.

If you have sensitive skin, you may prefer the gum to the patch.

Another advantage of nicotine gum is that it allows you to control the nicotine doses. The gum can be chewed as needed or on a fixed schedule during the day. The most recent research has shown that scheduled dosing works better. A schedule of 1 to 2 pieces per hour is common. On the other hand, with an as-needed schedule, you can chew when you need it most -- when you have cravings.

Some possible side effects of nicotine gum:

- Bad taste
- Throat irritation
- Mouth sores
- Hiccups
- Nausea
- Jaw discomfort
- Racing heartbeat

The gum can also damage dentures and dental work.

Symptoms related to the stomach and jaw are usually caused by improper use of the gum, such as swallowing the nicotine or chewing too fast.

Long-term dependence is one possible disadvantage of nicotine gum. In fact, research has shown that 15% to 20% of gum users who are able to quit smoking keep using the gum for a year or longer. Although the maximum recommended length of use is 6 months, continuing to use the gum is probably safer than going back to smoking. But since there is little research on the health effects of long-term nicotine gum use, most health care providers still recommend limiting its use to 6 months.

Nicotine nasal spray: The nasal spray delivers nicotine to the bloodstream as it is quickly absorbed through the nose. It is available only by prescription.

The nasal spray relieves withdrawal symptoms very quickly and lets you control your nicotine cravings. Smokers usually like the nasal spray because it is easy to use. But the FDA warns users that since this product contains nicotine, it can allow the addiction to continue. The FDA recommends that the spray be prescribed for 3-month periods and that it not be used for longer than 6 months.

The most common side effects last about 1 to 2 weeks and can include the following:

- Nasal irritation
- Runny nose
- Watery eyes
- Sneezing
- Throat irritation
- Coughing

There is also the danger of using more than is needed. If you have asthma, allergies, nasal polyps, or sinus problems, your doctor may suggest another form of NRT.

Nicotine inhalers: Inhalers are available only by prescription. The nicotine inhaler is a thin plastic tube with a nicotine cartridge inside. When you take a puff from the inhaler, the cartridge puts out a nicotine vapor. Unlike other inhalers, which deliver most of the medicine to the lungs, the nicotine inhaler delivers most of the nicotine vapor to the mouth. Nicotine inhalers are the FDA-approved nicotine replacement method that is most like smoking a cigarette, which some smokers find helpful.

The recommended dose is between 6 and 16 cartridges a day, for up to 6 months.

The most common side effects, especially when first using the inhaler, include:

- Coughing
- Throat irritation
- Upset stomach

At this time, inhalers are the most expensive forms of NRT available. They are not the same as electronic cigarettes, which have not been proven in clinical trials to help with quitting and are not approved by the FDA. (See section, "Other nicotine and tobacco products not reviewed or approved by the FDA.")

Nicotine lozenges: Nicotine-containing lozenges as an over-the-counter aid to stop smoking are the newest form of NRT on the market. As with nicotine gum, the lozenge is available in 2 strengths: 2 mg and 4 mg. Smokers choose their dose based on how long after waking up they normally have their first cigarette.

The lozenge manufacturer recommends using it as part of a 12-week program. The recommended dose is 1 lozenge every 1 to 2 hours for 6 weeks, then 1 lozenge every 2 to 4 hours for weeks 7 to 9, and finally, 1 lozenge every 4 to 8 hours for weeks 10 to 12. The manufacturer also recommends the following:

- Stop all smoking when you begin to use the lozenge.
- Do not eat or drink for 15 minutes before using the lozenge. (Some drinks can reduce how well the lozenge works.)
- Suck on the lozenge until it is fully dissolved, about 20 to 30 minutes. Do not bite or chew it like a hard candy, and do not swallow it. The medicine is taken in through the tissues of the mouth.
- Do not use more than 5 lozenges in 6 hours, or more than 20 lozenges total per day.
- Stop using the lozenge after 12 weeks. If you still feel you need to use the lozenge, talk to your doctor.
- Do not use the lozenge if you keep smoking, chewing tobacco, using snuff, or use any other product containing nicotine (such as the nicotine patch or nicotine gum).

Possible side effects of the nicotine lozenge include:

- Trouble sleeping
- Nausea
- Hiccups
- Coughing
- Heartburn
- Headache
- Flatulence (gas)

Which type of nicotine replacement may be right for you?

There's no evidence that any one type of nicotine replacement therapy (NRT) is any better than another. When choosing which type of NRT you will use, think about which method will best fit your lifestyle and pattern of smoking. Do you want/need something to chew or occupy your hands? Or are you looking for once-a-day convenience?

Some important points to think about:

- Nicotine gums, lozenges, and inhalers are substitutes you can put into your mouth that allow you to control your dosage to help keep cravings under better control.
- Nicotine gums and lozenges are generally sugar-free, but if you are diabetic and have any doubts, check with the manufacturer.
- Nicotine nasal spray works very quickly when you need it.
- Nicotine inhalers allow you to mimic the use of cigarettes by puffing and holding the inhaler.
- Nicotine patches are convenient and only have to be put on once a day.
- Both inhalers and nasal sprays require a doctor's prescription.
- Some people may not be able to use patches, inhalers, or nasal sprays because of allergies or other conditions.

Whatever type you use, take your NRT at the recommended dose, and for as long as it is recommended. If you use a different dose or stop taking it too soon, it can't be expected to work like it should. If you are a very heavy smoker or a very light smoker, you may want to talk with your doctor about whether your NRT dose should be changed to better suit your needs.

Combining the patch and other nicotine replacement products: Using the nicotine patch along with shorter-acting products such as the gum, lozenge, nasal spray, or inhaler is another method of NRT. The idea is to get a steady dose of nicotine with the patch and to use one of the shorter-acting products when you have strong cravings.

The few studies that have been done on combination NRT used in the way described above have found that it may work better than a single product. Still, more research is needed to prove this and to find safe and effective doses. And the combined use of NRT products has not yet been approved by the FDA. If you are thinking about using more than one NRT product, be sure to talk it over with your doctor first.

High-dose nicotine replacement therapy for heavy smokers: Another NRT option is to give smokers a higher dose based on the amount of nicotine that they have been getting from cigarettes. Sometimes this method has required larger doses of NRT than have been used before. High-dose NRT with patches has been studied with patients getting from 35 mg to 63 mg of nicotine per day. The research suggests that patients' withdrawal symptoms go away with these higher doses and their cravings improve without harmful effects on the heart and circulation. Patient were carefully watched in these studies to make sure they were doing well and were not becoming ill or having any problems. But not much is known about this option and it should be considered only with a doctor's guidance and supervision.

Stopping nicotine replacement therapy

As mentioned before, most forms of NRT are meant to be used for limited periods of time. Use should be tapered down to a low dose before NRT is stopped. Research is still being done to refine the use of NRT. For example, even though the patch is usually used for 3 to 5 months, some studies have suggested that using it for 8 weeks or less works just as well. But other researchers have noted that the risk of relapse goes up when nicotine replacement is stopped, even after it has been used for 5 months. These differences have not been fully explained. More studies are needed to learn which smokers are likely to be successful using shorter or longer NRT than usual. If you feel that you need NRT for a different length of time than is recommended, it is best to discuss this with your doctor.

12. Help with the physical part of addiction: Prescription drugs

Prescription drugs are another tool available to help smokers quit and stay quit. Some can be used along with nicotine replacement therapy (NRT), and some are started before your planned Quit Day. Talk to your doctor if you are interested in getting medicine to help you quit smoking. These are only available with a prescription.

Bupropion (Zyban®)

Bupropion (Zyban®) is a prescription anti-depressant in an extended-release form that reduces symptoms of nicotine withdrawal. It does not contain nicotine. This drug acts on chemicals in the brain that are related to nicotine craving. It can be used alone or together with nicotine replacement therapy (NRT). Bupropion works best if it is started 1 or 2 weeks before you quit smoking. The usual dosage is one or two 150 mg tablets per day.

This drug should not be taken if you have ever had seizures, heavy alcohol use, serious head injury, bipolar (manic-depressive) illness, or anorexia or bulimia (eating disorders).

Some doctors may recommend combination therapy for heavily-addicted smokers, such as using bupropion along with a nicotine patch and/or a short-acting form of NRT (such as gum or lozenges). The combination has been found to work better in some people than using any one part alone.

Varenicline (Chantix™)

Varenicline (Chantix[™]) is a newer prescription medicine developed to help people stop smoking. It works by interfering with nicotine receptors in the brain. This means it has 2 effects: it lessens the pleasurable physical effects a person gets from smoking, and it reduces the symptoms of nicotine withdrawal.

Several studies have shown varenicline can more than double the chances of quitting smoking. Some studies have also found it may work better than bupropion, at least in the short term.

Varenicline comes in pill form and is taken after meals, with a full glass of water. The daily dose increases over the first 8 days it is taken. The dose starts at one 0.5 mg pill a day for the first 3 days, then the 0.5 mg pill twice a day for the next 4 days. At the start of the second week, the dose is raised to 1 mg each morning and evening. For people who have problems with the higher dose, a lower dose may be used during the quit effort. Varenicline is given for 12 weeks, but people who quit during that time may get another 12 weeks of treatment to boost their chance of staying quit.

Reported side effects of varenicline have included headaches, nausea, vomiting, trouble sleeping, unusual dreams, flatulence (gas), and changes in taste. There have also been more recent reports of depressed mood, thoughts of suicide, attempted suicide, and changes in behavior in people taking varenicline. People who have these problems should contact their doctors right away. These side effects may happen, but varenicline is usually well-tolerated.

Since varenicline is a newer drug, not much research has been done yet to find out if it is safe to use at the same time as nicotine replacement therapy (NRT) products. A recent study has suggested that using varenicline along with NRT is well-tolerated and safe. But the company that makes varenicline noted that people who used the drug along with NRT had more side effects such as nausea and headaches. More research is needed.

"Off-label" drugs to help smokers quit

For those who cannot use any of the FDA-approved drugs for helping smokers quit, or for those who have not been able to quit using them, there are other drugs that have shown promise in research studies. They are recommended by the Agency for Healthcare Research and Quality for this kind of use, but have not been approved by the FDA for this purpose and are used "off-label." (See our document *Off Label Drug Use* for more information.) These drugs are only available with a prescription and are not recommended for pregnant smokers, teens, or people who smoke less than 10 cigarettes per day.

Nortriptyline

This is an older anti-depressant drug. When used in groups of smokers, it has been found to double their chances of success in quitting smoking. It is started 10 to 28 days before you stop smoking to allow it to reach a stable level in the body.

Some people have side effects like fast heart rate, blurred vision, trouble urinating, dry mouth, constipation, weight gain or loss, and low blood pressure when they stand up. The drug can impair your ability to drive or operate machinery, and there are certain drugs that cannot be used along with it.

Be sure your doctor and pharmacist know exactly what you are taking before you start this medicine. Also be sure you know how to take it and how to taper it down when you are ready to stop. The dose of nortriptyline must be slowly lowered, since the drug cannot be stopped suddenly without the possibility of serious effects. The drug must be used with caution in people with heart disease.

Clonidine

Clonidine is also an older drug that is FDA approved for the treatment of high blood pressure. When used for smoking cessation, it can be given as a pill twice a day or as a once-a-week skin patch. In one study of heavy smokers who had failed in previous quit attempts, the group treated with clonidine was twice as likely to succeed in quitting smoking as the control group (which was given a fake pill) at the end of 4 weeks.

Be sure your doctor and pharmacist know exactly what you are taking before you start this medicine. The most common side effects of clonidine are constipation, dizziness, drowsiness, dry mouth, and unusual tiredness or weakness. There are rarely more severe side effects, such as allergic reactions, slow heart rate, and very high or very low blood pressure. Your doctor may want to watch your blood pressure while you are on this drug. The drug can impair your ability to drive or operate machinery

Clonidine can be started up to 3 days before you quit smoking, but can also be started the day you quit. Like nortriptyline, it shouldn't be stopped suddenly. The dose must be lowered over 2 to 4 days to prevent a rapid increase in blood pressure, agitation, confusion, or tremors

13. Other methods of quitting

Other tools may also help some people, but there is no strong proof that they can improve your chances of quitting.

Hypnosis

Hypnosis methods vary a great deal, which makes it hard to study as a way to stop smoking. For the most part, reviews that looked at studies of hypnosis to help people quit smoking have not supported it as a quitting method that works. Still, some people find it useful. If you would like to try it, ask your doctor if he or she can recommend a good hypnotherapist.

Acupuncture

This method has been used to quit smoking, but there is little evidence to show that it works. Acupuncture for smoking is usually done on certain parts of the ears. (See our document, *Acupuncture* for more information.) For a list of local physician acupuncturists, contact the American Academy of Medical Acupuncture at 323-937-5514. Web site at www.medicalacupuncture.org.

Low-level laser therapy

This technique, also called cold laser therapy, is related to acupuncture. Cold lasers are sometimes used for acupuncture. The laser beams are used instead of needles to stimulate the body's acupoints. The treatment is supposed to relax the smoker and release endorphins (pain relief substances that are made naturally by the body) to mimic the effects of nicotine in the brain, or balance the body's energy to relieve the addiction. Despite claims of success by some cold laser therapy providers, there is no scientific evidence that shows this helps people stop smoking. (See our document, *Cold Laser Therapy* for more information.)

Filters

Filters that reduce tar and nicotine in cigarettes do not work. In fact, studies have shown that smokers who use filters tend to smoke more.

Smoking deterrents

Other methods have been used to help stop smoking, such as over-the-counter products that change the taste of tobacco, stop-smoking diets that curb nicotine cravings, and combinations of vitamins. At this time there is little scientific evidence to support that any of these work.

Herbs and supplements

There is little scientific evidence to support the use of homeopathic aids and herbal supplements as stop-smoking methods. Because they are marketed as dietary supplements (not drugs), they don't need FDA approval to be sold. The manufacturers don't have to prove they work, or even that they're safe. Be sure to look closely at the label of any product that claims it can help you stop smoking. No dietary supplement has been proven to help people quit smoking. Most of these supplements are combinations of herbs, but not nicotine. They have no proven track record of helping people to stop smoking.

Atropine and scopolamine combination therapy

A few smoking cessation clinics offer a program using shots of the drugs atropine and scopolamine, sometimes along with other drugs, to help reduce nicotine withdrawal symptoms. These drugs block the action of acetylcholine, a signal transmitter in the nervous system. Called anticholinergics, they are more often prescribed for other reasons, such as digestive problems, motion sickness, or Parkinson's disease. People who are pregnant or have heart problems, glaucoma, or uncontrolled high blood pressure are not allowed to take part in these programs.

The treatment usually involves shots given in the clinic on one day, then a few weeks of pills and wearing patches behind the ear. Other drugs may be needed to help with side effects. Side effects of this treatment can include dizziness, constipation, dry mouth, changes in the sense of taste and smell, problems urinating, and blurry vision.

Some clinics claim high success rates, but the available published scientific research does not back up these claims. Both atropine and scopolamine are FDA-approved for other uses and have not been formally studied or approved for help in quitting smoking. Before going into such a program, you may want to ask the clinic about long-term success rates (up to a year). These medicines are directed only at the physical aspect of quitting, so you may also want to find out if the program includes counseling or other methods aimed at the psychological aspects of quitting.

Other nicotine and tobacco products not reviewed or approved by the FDA

Tobacco lozenges and pouches

Lozenges that contain tobacco (like Ariva® and Interval®), and small, pouches of tobacco (like Revel® and Exalt®) are being sold as other ways for smokers to get nicotine in places where smoking is not allowed. The FDA has ruled that these are types of oral tobacco products much like snuff and chew, and are not smoking cessation aids. There is no evidence that these products can help a person quit smoking. Unlike scientifically proven treatments with known effects, such as nicotine replacement products, anti-depressants, nicotine receptor blockers, or behavioral therapy, these oral tobacco products have never been tested to see if they can help people quit tobacco.

We know that oral tobacco products such as snuff and chewing tobacco contain human carcinogens. These products cause mouth cancer and gum disease. They also destroy the bone sockets around teeth and can cause teeth to fall out. There are studies showing potential harmful effects on the heart and circulation, as well as increased risks of other cancers. They also cause bad breath and stain the teeth.

Electronic cigarettes

In 2004, a Chinese company started making a refillable "cigarette" with a battery and an electronic chip in it. It is designed to look like a cigarette, right down to the glowing tip. When the smoker puffs on it, the system delivers a mist of liquid, flavorings, and nicotine that looks something like smoke. The smoker inhales it like cigarette smoke, and the nicotine is absorbed into the lungs.

The electronic cigarette, or e-cigarette, is sold with cartridges of nicotine and flavorings. Several brands and varieties of the e-cigarette are now sold in the US. Here, the ecigarette is usually sold as a way to get nicotine in places where smoking is not allowed, although some may sell it as a way to quit smoking. The cartridges are sold as having different doses of nicotine, from high doses to no nicotine at all.

The e-cigarette has no published clinical trials that suggest it might work as a way to help smokers quit. No clinical trials have been submitted to the FDA. As of 2009, the FDA has not ruled as to whether e-cigarettes are medical devices but it is investigating. There are also questions about how safe it is to inhale some substances in the nicotine mists into the lungs. E-cigarettes are not labeled with their ingredients, so the consumer doesn't know what's in them. And even substances that are safe to eat can harm delicate tissues inside the lungs.

Newer information from the FDA suggests that e-cigarettes are not safe. A 2009 analysis of 18 samples of cartridges from 2 leading e-cigarette brands found cancercausing substances in half the samples. There were other impurities noted as well. For example, diethylene glycol, a toxic ingredient found in antifreeze, was found in one sample.

Information from the same testing suggests that there may be manufacturing problems with e-cigarettes. Nicotine levels from each puff varied a great deal, even between cartridges labeled as having the same nicotine amounts. Testing also found small amounts of nicotine in most of the cartridges labeled nicotine-free.

Like other forms of nicotine, the e-cigarettes and nicotine cartridges can be toxic to children or pets. They can also pose a choking hazard.

Nicotine lollipops and lip balms

In the past, some pharmacies made a product called a nicotine lollipop. These lollipops often contained a product called nicotine salicylate with a sugar sweetener. Nicotine salicylate is not approved by the FDA for pharmacy use. The FDA has warned pharmacies to stop selling nicotine lollipops and lip balm on the Internet, calling the products "illegal." The FDA also said "the candy-like products present a risk of accidental use by children."

Other smoking cessation products like these may not use nicotine salicylate and, therefore, may be legal. But they still pose a risk for children if they are not well-labeled and stored safely.

Nicotine water and nicotine wafers

These products are advertised as ways to get nicotine in places where smoking is not allowed. They are not marketed as aids to quitting smoking, but questions about their safety have been raised. Some of these formulas can be quite dangerous if accidentally taken by children or pets, so they must be stored carefully.

14. A word about quitting success rates

Before you start using nicotine replacement or sign up for a stop smoking class or program, you may wonder about its success rate. Success rates are hard to figure out for many reasons. First, not all programs define success in the same way. Does success mean that a person is not smoking at the end of the program? After 3 months? 6 months? 1 year? Does smoking fewer cigarettes (rather than stopping completely) count as success? If a program you're considering claims a certain success rate, ask for more details on how success is defined and what kind of follow-up is done to confirm the rate.

The truth is that quit smoking programs, like other programs that treat addictions, often have fairly low success rates. But that does not mean they are not worthwhile or that you should be discouraged. Your own success in quitting is what really counts, and that is under your control.

Success rates in general

Only about 4% to 7% of people are able to quit smoking on any given attempt without medicines or other help.

Studies in medical journals have reported that between about 25% and 33% of smokers who use medicines can stay smoke-free for over 6 months. There is also early evidence that combining some medicines may work better than using them alone. (See the section, "Help with the physical part of addiction.")

Behavioral and supportive therapies may increase success rates even further. Check the package insert of any product you are using to see if the manufacturer provides free telephone-based counseling.

15. How to quit

Smokers often say, "Don't tell me why to quit, tell me how." There is no one right way to quit, but there are some key elements in quitting with success. These 4 factors are key:

- Making the decision to quit
- Setting a quit date and choosing a quit plan
- Dealing with withdrawal
- Staying quit (maintenance)

Making the decision to quit

The decision to quit smoking is one that only you can make. Others may want you to quit, but the real commitment must come from you.

Think about why you want to quit.

- Are you worried that you could get a smoking-related disease?
- Do you really believe that the benefits of quitting outweigh the benefits of continuing to smoke?
- Do you know someone who has had health problems because of their smoking?
- Are you ready to make a serious try at quitting?

If you are thinking about quitting, setting a date and deciding on a plan will move you to the next step.

Setting a quit date and making a plan

Pick a Quit Day

Once you've decided to quit, you're ready to pick a quit date. This is a very important step. Pick a specific day within the next month as your Quit Day. Picking a date too far away can allow you time to rationalize and change your mind. But do give yourself enough time to prepare and come up with a plan. You might choose a date with a special meaning like a birthday or anniversary, or the date of the Great American Smokeout (the third Thursday in November each year). Or you may want to just pick a random date. Circle the date on your calendar. Make a strong, personal commitment to quit on that day.

Plan for your prescriptions: Remember that if you are planning to use a prescription drug, you will need to talk with your doctor about getting it in time for your Quit Day. If you plan to use bupropion (Zyban) or varenicline (Chantix), you must start taking the drug a full week before your Quit Day. If you are using one of these medicines, add a note on your calendar for the week before your Quit Day to remind you to start taking the drug.

Prepare for your Quit Day

There is no one right way to quit. Most smokers prefer to quit cold turkey -- they stop completely, all at once. They smoke until their Quit Day and then quit. Or they may smoke fewer cigarettes for 1 or 2 weeks before their Quit Day. Another way involves cutting down on the number of cigarettes you smoke each day. With this method, you slowly reduce the amount of nicotine in your body. You might cut out cigarettes smoked with a cup of coffee, or you might decide to smoke only at certain times of the day. While it makes sense to cut down in order to reduce withdrawal symptoms, in practice this can be hard to do.

Quitting smoking is a lot like losing weight: it takes a strong commitment over a long time. Smokers may wish there was a magic bullet -- a pill or method that would make quitting painless and easy. But there is nothing like that. Nicotine substitutes can help reduce withdrawal symptoms, but they work best when they are used as part of a stop-smoking plan that addresses both the physical and psychological components of quitting smoking.

Here are some steps to help you prepare for your Quit Day:

- Pick the date and mark it on your calendar.
- Tell friends and family about your Quit Day.
- Get rid of all the cigarettes and ashtrays in your home, car, and place of work.
- Stock up on oral substitutes -- sugarless gum, carrot sticks, hard candy, cinnamon sticks, coffee stirrers, straws, and/or toothpicks.
- Decide on a plan. Will you use NRT or other medicines? Will you attend a stopsmoking class? If so, sign up now.
- Practice saying, "No thank you, I don't smoke."
- Set up a support system. This could be a group class, Nicotine Anonymous, or a friend or family member who has successfully quit and is willing to help you. Ask family and friends who still smoke not to smoke around you or leave cigarettes out where you can see them.
- If you are using bupropion or varenicline, take your dose each day of the week leading up to your Quit Day.

• Think back to your past attempts to quit. Try to figure out what worked and what did not work for you.

Successful quitting is a matter of planning and commitment, not luck. Decide now on your own plan. Some options include using nicotine replacement or other medicines, joining a stop-smoking class, going to Nicotine Anonymous meetings, using self-help materials such as books and pamphlets, or some combination of these methods. For the best chance at success, your plan should include 2 or more of these options.

Your Quit Day

On your Quit Day, follow these suggestions:

- Do not smoke. This means none at all -- not even one puff!
- Keep active -- try walking, exercising, or doing other activities or hobbies.
- Drink lots of water and juices.
- Begin using nicotine replacement if that is your choice.
- Attend stop-smoking class or follow your self-help plan.
- Avoid situations where the urge to smoke is strong.
- Reduce or avoid alcohol.
- Think about changing your routine. Use a different route to go to work, drink tea instead of coffee. Eat breakfast in a different place or eat different foods.

Read on to find out more about the kinds of thoughts and temptations that come up when you try to quit, and ideas for ways to deal with or avoid them.

Dealing with withdrawal

Withdrawal from nicotine has 2 parts -- the physical and the mental. The physical symptoms, while annoying, are not life-threatening. Nicotine replacement and other medicines can help reduce many of these physical symptoms. Most smokers find that the bigger challenge is the mental part of quitting.

If you have been smoking for any length of time, smoking has become linked with nearly everything you do -- waking up in the morning, eating, reading, watching TV, and drinking coffee, for example. It will take time to "un-link" smoking from these activities. This is why, even if you are using a nicotine replacement, you may still have strong urges to smoke.

Rationalizations are sneaky

One way to overcome these urges or cravings is to notice and identify *rationalizations* as they come up. A rationalization is a mistaken thought that seems to make sense to you at the time, but the thought is not based on reality. If you choose to believe in such a thought, it can serve as a way to justify smoking. If you have tried to quit before, you will probably recognize many of these common rationalizations:

- I'll just have one to get through this rough spot.
- Today is not a good day. I'll quit tomorrow.
- It's my only vice.
- How bad is smoking, really? Uncle Harry smoked all his life and he lived to be over 90.
- Air pollution is probably just as bad.
- You've got to die of something.
- Life is no fun without smoking.

You probably can add more to the list. As you go through the first few days without smoking, write down any rationalizations as they come up and recognize them for what they are: messages that can trick you into going back to smoking. Look out for them, because they always show up when you're trying to quit. After you write down the idea, let it go from your mind. Be ready with a distraction, a plan of action, and other ways to re-direct your thoughts to something else.

Use the ideas below to help you stay committed to quitting.

Avoid temptation

Stay away from people and places where you are tempted to smoke. Later on you will be able to handle these with more confidence.

Change your habits

Switch to juices or water instead of alcohol or coffee. Take a different route to work. Take a brisk walk instead of a coffee break.

Alternatives: Use substitutes you can put in your mouth such as sugarless gum or hard candy, raw vegetables such as carrot sticks, or sunflower seeds. Some people chew on a coffee stirrer or a straw.

Activities: Do something to reduce your stress. Exercise or do hobbies that keep your hands busy, such as needlework or woodworking, which can help distract you from the urge to smoke. Take a hot bath, exercise, or read a book.

Deep breathing: When you were smoking, you breathed deeply as you inhaled the smoke. When the urge strikes now, breathe deeply and picture your lungs filling with fresh, clean air. Remind yourself of your reasons for quitting and the benefits you'll gain as an ex-smoker.

Delay: If you feel that you are about to light up, delay. Tell yourself you must wait at least 10 minutes. Often this simple trick will allow you to move beyond the strong urge to smoke.

Reward yourself

What you're doing is not easy, so you deserve a reward. Put the money you would have spent on tobacco in a jar every day and then buy yourself a weekly treat. Buy a magazine or book, go out to eat, develop a new hobby, or take a yoga class. Or save the money for a major purchase. You can also reward yourself in ways that don't cost money: visit a park, go to the library, and check local news listings for museums, community centers, and colleges that have free classes, exhibits, films, and other things to do.

Staying quit (maintenance)

Remember the Mark Twain quote? Maybe you, too, have quit many times before. If so, you know that staying quit is the final, longest, and most important stage of the process. You can use the same methods to stay quit as you did to help you through withdrawal. Think ahead to those times when you may be tempted to smoke, and plan on how you will use other ways to cope with these situations.

More dangerous, perhaps, are the unexpected strong desires to smoke that can sometimes happen months, or even years after you've quit. To get through these without relapse, try these:

- Review your reasons for quitting and think of all the benefits to your health, your finances, and your family.
- Remind yourself that there is no such thing as just one cigarette -- or even one puff.
- Ride out the desire to smoke. It will go away, but do not fool yourself into thinking you can have just one.
- Avoid alcohol. Drinking lowers your chance of success.

• If you are worried about gaining weight, put some energy into eating a healthy diet and staying active with exercise.

Recovering from slips

What if you do smoke? The difference between a slip and a relapse is within your control. A slip is a one-time mistake that is quickly corrected -- a relapse is going back to smoking. You can use the slip as an excuse to go back to smoking, or you can look at what went wrong and renew your commitment to staying away from smoking for good.

Even if you do relapse, try not to get too discouraged. Very few people are able to quit for good on the first try. In fact, it takes most people many attempts before quitting for good. What's important is figuring out what helped you when you tried to quit and what worked against you. You can then use this information to make a stronger attempt at quitting the next time.

16. Some special concerns

Weight gain

Many smokers do gain some weight when they quit. But even when steps aren't taken to try to prevent this, the gain is usually less than 10 pounds. Women tend to gain slightly more weight than men. There is some evidence that smokers will gain weight after they quit even if they do not eat more. There are some studies that suggest that nicotine replacement therapy or bupropion may help delay weight gain, but they don't prevent it.

For some people, a concern about weight gain can lead to a decision not to quit. But the weight gain that follows quitting smoking is usually very small. It is much more dangerous to keep smoking than it is to gain a small amount of weight.

You are more likely to be quit smoking successfully if you deal with the smoking first, and then later take steps to reduce your weight. While you are quitting, try to focus on ways to help you stay healthy, rather than on your weight. Stressing about your weight may make it harder to quit. Eat plenty of fruits and vegetables and limit the fat. Be sure to drink plenty of water, and get enough sleep and regular physical activity.

Try walking

Walking is a great way to be physically active and increase your chances of staying quit. Walking can help you by:

- Reducing stress
- Burning calories and toning muscles
- Giving you something to do instead of thinking about smoking

No special equipment or clothing is needed for walking, other than a pair of comfortable shoes. And most people can do it pretty much anytime. You can use these ideas as starting points and come up with more of your own:

- Walk around a shopping mall
- Get off the bus one stop before you usually do
- Find a buddy to walk with during lunch time at work
- Take the stairs instead of the elevator
- Walk with a friend, family member, or neighbor after dinner

- Push your baby in a stroller
- Take a dog (yours or a maybe neighbor's) out for a walk

Set a goal of 30 minutes of physical activity 5 or more times a week. But if you don't already exercise regularly, please check with your doctor before starting any exercise program.

Stress

Smokers often mention stress as one of the reasons for going back to smoking. Stress is a part of everyone's lives, smokers and non-smokers alike. The difference is that smokers have come to use nicotine to help cope with stress and unpleasant emotions. When quitting, you have to learn new ways of handling stress. Nicotine replacement can help to some extent, but for long-term success you will need other strategies, too.

As mentioned above, physical activity is a good stress-reducer. It can also help with the short-term sense of depression that some smokers have when they quit. There are also stress-management classes and self-help books. Check your community newspaper, library, or bookstore.

Spiritual practices such as admitting that you cannot control your addiction and believing that a higher power can give you strength have been used with much success to deal with other addictions. These practices, along with the fellowship of others on a similar path, are a key part of 12-step recovery programs. These same principles can be applied to quitting smoking.

Taking care of yourself

It is important for your health care provider to know of any present or past tobacco use so he or she can be sure that you will get the preventive health care you need. It is well known that using tobacco use puts you at risk for certain health-related illnesses, so part of your health care should focus on related screening and preventive measures to help you stay as healthy as possible. For example, you will want to be certain that you regularly check inside your mouth for any changes. Have your doctor or dentist look at your mouth, tongue, or throat if you have any changes or problems. The American Cancer Society recommends that medical check-ups should include oral cavity (mouth) exams. This way, tobacco users may be able to find changes such as leukoplakia (white patches on the mouth tissues) early, and prevent oral cancer or find it at a stage that is easier to treat. You should also be aware of any of the following changes:

- Change in cough
- A new cough
- Coughing up blood
- Hoarseness
- Trouble breathing
- Wheezing
- Headaches
- Chest pain
- Loss of appetite
- Weight loss
- General tiredness
- Frequent lung or bronchial infections

Any of these could be signs of lung cancer or a number of other lung conditions and should be reported to a doctor. While these can be signs of a problem, people with lung cancer often do not notice any symptoms until the cancer has spread to other parts of the body.

Remember that tobacco users have a higher risk for other cancers as well, depending on the way they use tobacco. You can learn about the types of cancer you may be at risk for by reading our document that discusses the way you use tobacco (see the "Additional resources" section). Other risk factors for these cancers may be more important than your use of tobacco, but you should know about the extra risks that might apply to you.

If you have any health concerns that may be related to your tobacco use, please see a health care provider as soon as possible. Taking care of yourself and getting treatment for small problems will give you the best chance for successful treatment. The best way, though, to take care of yourself and decrease your risk for life-threatening health problems is to quit using tobacco

17. Additional resources

It is hard to stop smoking. But if you are a tobacco user you can quit! More than 48 million Americans have quit smoking for good. Many organizations offer information, counseling, and other services to help you quit, as well as information on where to go for help. Other good resources to ask for help can include your doctor, dentist, local hospital, or employer.

More information from your American Cancer Society

We have selected some related information that may also be helpful for you. These materials may be viewed on our Web site or ordered from our toll-free number.

Child and Teen Tobacco Use (also available in Spanish)

Cigar Smoking (also available in Spanish)

Cigarette Smoking (also available in Spanish)

Double Your Chances of Quitting Smoking

Guide to Quitting Smoking (also available in Spanish)

Helping a Smoker Quit: Do's and Don'ts

Questions About Smoking, Tobacco, and Health (also available in Spanish)

Quitting Smoking -- Help for Cravings and Tough Situations (also available in Spanish)

Smokeless Tobacco and How to Quit

Smoking and Cancer Mortality Table

Smoking in the Workplace -- A Model Policy

Tobacco-Related Cancers Fact Sheet

Women and Smoking (also available in Spanish)

National organizations and Web sites*

If you want to quit smoking and need help, contact one of the following organizations. Along with the American Cancer Society, other sources of information and support include:

American Heart Association & American Stroke Association

Toll-free number: 1-800-242-8721 (1-800-AHA-USA-1) Web site: www.americanheart.org Toll-free number: 1-888-478-7653 (1-888-4-STROKE) Web site: www.strokeassociation.org

Quitting tips and advice can be found at everydaychoices.org or by calling 1-866-399-6789.

American Lung Association

Toll-free number: 1-800-548-8252 Web site: www.lungusa.org

Printed quit materials are available, some in Spanish. Also offers the tobacco cessation program "Freedom from Smoking Online" at www.ffsonline.org.

Centers for Disease Control and Prevention

Office on Smoking and Health Toll-free number: 1-800-232-4636 (1-800-CDC-INFO) Web site: www.cdc.gov/tobacco Free quit support line: 1-800-784-8669 (1-800-QUIT-NOW) TTY: 1-800-332-8615

Environmental Protection Agency (EPA)

Telephone: 202-272-0167 Web site: www.epa.gov

Has advice on how to protect children from secondhand smoke, a Smoke-free Homes Pledge, and other tobacco-related materials on the direct Web site, www.epa.gov/smokefree, or at 1-866-766-5337 (1-866-SMOKE-FREE).

National Cancer Institute

Toll-free number: 1-800-422-6237 (1-800-4-CANCER) Web site: www.cancer.gov Toll-free tobacco line: 1-877-448-7848 Tobacco quit line: 1-800-784-8669 (1-800-QUITNOW) Direct tobacco Web site: www.smokefree.gov

Quitting information, cessation guide, and counseling is offered, as well as information on state telephone-based quit programs.

Nicotine Anonymous

Toll-free number: 1-877-879-6422 Web site: www.nicotine-anonymous.org

For free information, meeting schedules, printed materials, or information on how to start a group in your area.

QuitNet

Web site: www.quitnet.com

Offers free, cutting edge, effective tobacco cessation services to people worldwide.

*Inclusion on this list does not imply endorsement by the American Cancer Society.

No matter who you are, we can help. Contact us anytime, day or night, for information and support. Call us at **1-800-227-2345** or visit <u>www.cancer.org</u>.

18. References

Abbot NC, Stead LF, White AR, et al. Hypnotherapy for smoking cessation. *Cochrane Database Syst Rev.* 2000;(2):CD001008.

American Cancer Society. Cancer Facts & Figures 2010. Atlanta, Ga. 2010.

American Cancer Society. *Cancer Prevention & Early Detection Facts & Figures* 2008. Atlanta, Ga. 2008. Accessed at <u>www.cancer.org/downloads/STT/CPED_2008.pdf</u> on September 4, 2009.

American Lung Association. *Trends in Tobacco Use*. July 2008. Accessed at <u>www.lungusa.org</u> on September 4, 2009.

Buist AS, McBurnie MA, Vollmer WM, et al, on behalf of the BOLD Collaborative Research Group. International variation in the prevalence of COPD (The BOLD Study): a population-based prevalence study. *Lancet*. 2007;370:741-750.

CDC National Center For Chronic Disease Prevention and Health Promotion. *Quit to Live: How and Why to Quit Smoking Today*. Accessed at www.cdc.gov/tobacco/news/QuitSmoking.htm on September 12, 2006.

Centers for Disease Control and Prevention (CDC). Annual smoking-attributable mortality, years of potential life lost, and economic costs - United States, 2000--2004. *Morb Mort Wkly Rep.* 2008;57:1226-1228. Accessed at www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a3.htm on September 4, 2009.

Centers for Disease Control and Prevention (CDC). Cigarette Smoking Among Adults— United States, 2007. *Morb Mort Wkly Rep.* 2008;57(45):1221-1226. Accessed at <u>www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a2.htm</u> on September 3, 2009.

Centers for Disease Control and Prevention (CDC). Cigarette Smoking Among Adults and Trends in Smoking Cessation—United States, 2008. *Morb Mort Wkly Rep.* 2009;58(44):1227-1232. Accessed at www.cdc.gov/mmwr/preview/mmwrhtml/mm5844a2.htm on November 24, 2009.

Cogliano V, Straif K, Baan R, et al. Smokeless tobacco and tobacco-related nitrosamines. *Lancet Oncol.* 2004;5:708.

Critchley JA, Unal B. Is smokeless tobacco a risk factor for coronary heart disease? A systematic review of epidemiological studies. *Eur J Cardiovasc Prev Rehabil.* 2004;11:101-112.

Ebbert JO, Burke MV, Hays JT, Hurt RD. Combination treatment with varenicline and nicotine replacement therapy. *Nicotine Tob Res.* 2009;1:572-576.

Fagerstrom KO, Hughes JR. Nicotine concentrations with concurrent use of cigarettes and nicotine replacement: a review. *Nicotine Tob Res.* 2002;4 Suppl 2:573-579.

Fiore MC, Jaen CR, Baker TB, et al. Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline. Rockville, MD: US Department of Health and Human Services, Public Health Service; 2008. Accessed at www.surgeongeneral.gov/tobacco/treating_tobacco_use08.pdf on September 4, 2009.

Gaither KH, Brunner Huber LR. Thompson ME, Huet-Hudson YM. Does the Use of Nicotine Replacement Therapy During Pregnancy Affect Pregnancy Outcomes? *Matern Child Health J.* 2009;13:497–504.

Henley SJ, Connell CJ, Richter P, et al. Tobacco-related disease mortality among men who switched from cigarettes to spit tobacco. *Tob Control.* 2007;16:22-28.

Henley SJ, Thun MJ, Connell C, Calle EE. Two large prospective studies of mortality among men who use snuff or chewing tobacco (United States). *Cancer Causes Control*. 2005;16:347-358.

Henningfield JE, Fant RV, Buchhalter AR, Stitzer ML. Pharmacotherapy for nicotine dependence. *CA Cancer J Clin.* 2005;55:281-299.

Hughes JR. Effects of abstinence from tobacco: valid symptoms and time course. *Nicotine Tob Res.* 2007;9:315-327.

Hughes JR, Stead LF, Lancaster T. Antidepressants for smoking cessation. *Cochrane Database Syst Rev.* 2007;(1):CD000031.

Joad JP. Smoking and pediatric respiratory health. *Clin Chest Med.* 2000;21:37-46,vii-viii.

Joseph AM, Fu SS. Safety issues in pharmacotherapy for smoking in patients with cardiovascular disease. *Prog Cardiovasc Dis.* 2003;45:429-441.

Joseph AM, Fu SS. Smoking cessation for patients with cardiovascular disease: What is the best approach? *Am J Cardiovasc Drugs*. 2003;3:339-349.

Keller PA, Beyer EJ, Baker TB, et al. Tobacco Cessation Quitline Spending in 2005 and 2006: What State-Level Factors Matter? *Int. J. Environ. Res. Public Health.* 2009;6:259-266.

Oncken C, Gonzales D, Nides M, et al. Efficacy and safety of the novel selective nicotinic acetylcholine receptor partial agonist, varenicline, for smoking cessation. *Arch Intern Med.* 2006;166:71-77.

Mahmud, A, Feely, J. Effect of Smoking on Arterial Stiffness and Pulse Pressure Amplication. *Hypertension*. 2003;441:183.

Medioni J, Berlin I, Mallet A. Increased risk of relapse after stopping nicotine replacement therapies: A mathematical modeling approach. *Addiction*. 2005;100:247-254.

Nides, M. Oncken C, Gonzales D, et al. Smoking cessation with varenicline, a selective alpha4beta2 nicotinic receptor partial agonist: results from a 7-week, randomized, placebo-and bupropion-controlled trial with 1-year follow-up. *Arch Intern Med.* 2006;166:1561-1568.

Schroeder SA. What to do with a patient who smokes. Grand Rounds at the University of California, San Francisco. *JAMA*. 2005;294:482-487.

Shiffman S, Ferguson SG, Gwaltney CJ, et al. Reduction of abstinence-induced withdrawal and craving using high-dose nicotine replacement therapy. *Psychopharmacology*. 2006;184:637-644.

Shiffman S, Scharf DM, Shadel WG, et al. Analyzing milestones in smoking cessation: Illustration in a nicotine patch trial in adult smokers. *J Consult Clin Psychol.* 2006;74:276-285.

Shiri R, Häkkinen J, Koskimäki J, et al. Smoking causes erectile dysfunction through vascular disease. *Urology*. 2006;68:1318-1322.

Stead LF, Perera R, Bullen C, et al. Nicotine replacement therapy for smoking cessation. *Cochrane Database Syst Rev.* 2008;(1):CD000146.

Underner M, Paquereau J, Meurice JC. Cigarette smoking and sleep disturbances. *Rev Mal Respir.* 2006;23 Suppl 3: 67-77.

US Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke [2006]*. Accessed at www.surgeongeneral.gov/library/secondhandsmoke/report/ on September 4, 2009.

US Department of Health & Human Services. *The Health Benefits of Smoking Cessation: A Report of the Surgeon General. Centers for Disease Control and Prevention (CDC*), Office on Smoking and Health. 1990. Accessed at http://profiles.nlm.nih.gov/NN/B/B/C/T/ on September 4, 2009.

US Department of Health & Human Services. 2004 Surgeon General's Report--The Health Consequences of Smoking. Centers for Disease Control and Prevention (CDC), Office on Smoking and Health. Accessed at: www.cdc.gov/tobacco/data_statistics/sgr/2004/index.htm on September 4, 2009.

US Department of Health & Human Services. *The Health Consequences of Smoking: Nicotine Addiction: A Report of the Surgeon General.* Centers for Disease Control and Prevention (CDC), Office on Smoking and Health. 1988. Accessed at <u>http://profiles.nlm.nih.gov/NN/B/B/Z/D/</u> on September 4, 2009.

US Department of Health & Human Services. *Reducing the Health Consequences of Smoking: 25 Years of Progress. A Report of the Surgeon General: 1989 Executive Summary.* Centers for Disease Control and Prevention (CDC), Office on Smoking and Health. 1989. Accessed at <u>http://profiles.nlm.nih.gov/NN/B/B/X/S/</u> on September 4, 2009.

US Department of Health and Human Services. 2000 Surgeon General's Report--Reducing Tobacco Use. Centers for Disease Control and Prevention (CDC), Office on Smoking and Health. 2000. Accessed at www.cdc.gov/tobacco/data_statistics/sgr/2000/index.htm_on September 4, 2009.

US Department of Health and Human Services. *The Health Consequences of Involuntary Smoking: A Report of the Surgeon General.* Washington, DC: Department of Health and Human Services; 1986. Accessed at: http://profiles.nlm.nih.gov/NN/B/C/P/M/_/nnbcpm.pdf on September 4, 2009.

US Department of Health and Human Services. US Food and Drug Administration. Summary of Results: Laboratory Analysis of Electronic Cigarettes Conducted By FDA. Accessed at www.fda.gov/NewsEvents/PublicHealthFocus/ucm173146.htm on September 3, 2009.

White AR, Rampes H, Campbell JL. Acupuncture and related interventions for smoking cessation. *Cochrane Database Syst Rev.* 2006;(1):CD000009.

World Health Organization. Marketers of electronic cigarettes should halt unproved therapy claims (News release). 19 September 2008. Accessed at www.who.int/mediacentre/news/releases/2008/pr34/en/index.html on September 4, 2009.