Smoking, Tobacco Use, and HIV

We now know that smoking and using smokeless tobacco products like dip, snuff, or chew can seriously harm your health. We also know that quitting smoking or other tobacco products can stop, and in some cases reverse, these harmful effects.

While quitting smoking or smokeless tobacco is not easy, it is often the single biggest thing you can do to improve your health. You can do it - and there are many resources available to help you.

Smoking, Tobacco Use, and HIV

Cigarette smoking is a dangerous habit even for those in perfect health. However, the risks involved with smoking seem to be greater for those living with HIV. In fact, recent research has shown that, for people living with HIV and receiving good medical care, those who smoke lose more years of their life to smoking than to HIV.

In years past, many people living with HIV did not worry about the serious illnesses that smoking
might cause because they did not expect to be alive long enough to get them. Now that people living with HIV are living longer, healthier lives, it is important to pay attention to issues that affect their long-term health.

Using tobacco products may affect HIV in several ways:

- Less successful HIV drug therapy: researchers think smoking may cause HIV drugs not to work as well as they should
- More likely to experience side effects [2] of HIV drugs
- Lower CD4 [3] counts
- Greater chance of developing opportunistic infections (OIs) [4]

**The Bad News: How Smoking and Tobacco Use Can Hurt Your Health**

All forms of tobacco are harmful and addictive. This includes cigarettes, pipes, and cigars as well as smokeless tobacco products such as snuff and chewing tobacco (also known as chew or dip). Smoking affects every system in the body. Some of tobacco's harmful effects are caused by nicotine, the addictive substance in tobacco, while others are caused by any of the 250 toxic chemicals in tobacco smoke. In the short run, smoking raises your blood pressure and heart rate. However, most of the serious negative effects of smoking take years to develop and most commonly include cancer, heart disease, and lung problems.

Electronic cigarettes (e-cigarettes) or vape pens are battery-powered tubes or cylinders that often look like pens, cigars, pipes, or cigarettes. While they are smokeless and do not expose users to the tar found in cigarettes, they do contain nicotine, the addictive substance in tobacco. Users inhale the nicotine as it is released by the e-cigarette in the form of water vapor, like a mist or cloud (often called "vaping").

For several years, the US Food and Drug Administration (FDA) did not regulate e-cigarettes. As a result, the contents of e-cigarettes – what you might be putting into your lungs – were not fully known and their health effects were not fully understood. In May 2016, the FDA extended its oversight to include e-cigarettes. This is an important step in protecting the public's health, especially since we now know that e-cigarettes are most likely as addictive as traditional cigarettes. In addition, many of the flavors given to e-cigarettes come from chemicals that may be safe in foods but are likely harmful when inhaled.

**Smoking and Heart Disease**

Smoking is very bad for your heart. Smoking causes your blood vessels to constrict (get smaller). This reduces oxygen flow to the rest of your body, raises your blood pressure, and makes your heart work harder. To learn more about how the heart works – and how smoking affects heart health – see our fact sheet on Caring for Your Heart [5].

Many people living with HIV have high levels of lipids (fats or fat-like substances) such as cholesterol and/or triglycerides in their blood because of HIV itself or because of certain HIV drugs. If you have too much cholesterol in your blood, it can build up in your arteries, forming plaque. Smoking makes this problem worse, since it makes your blood vessels stickier, thus making it easier for plaque to clog your arteries and cause a heart attack or stroke. For more information, see our fact sheet on Hyperlipidemia: High Cholesterol and Triglycerides [6].

Smoking uses up your body's levels of vitamins and minerals [7] called antioxidants. These vitamins and minerals help protect the body against heart disease and cancer.

**Smoking and Cancer**
In the US, investigators have reported that smoking is the single biggest risk factor for non-AIDS defining cancers among people living with HIV. In people living with HIV, smoking affects the risk of getting cancer more than having a low CD4 count, a non-suppressed viral load, hepatitis C, or an AIDS diagnosis. Please see our fact sheet on Cancers for more information about cancer and HIV.

Most people know that there is a strong link between cigarette smoking and lung cancer. Of the several thousand chemicals in tobacco smoke, at least 69 are known to cause cancer. Lung cancer is very serious and usually fatal. Compared to non-smokers, smoking increases women's risk of lung cancer by 13 times - and men's by 23 times.

In addition to lung cancer, smokers are also at higher risk for:

- Cervical cancer
- Uterine cancer
- Cancer of the mouth, throat, voice box, and many more

**Smoking and Lung Disease**

Smoking damages the small air sacs in the lungs called alveoli that help us take in oxygen. It is therefore the main cause of chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. Smoking can also make asthma worse and can increase the risk of respiratory infections. This is especially important for people with low CD4 counts.

**Smoking and Opportunistic Infections**

The rates of opportunistic infections (OIs) among people living with HIV have dropped drastically since people began using combinations of HIV drugs. But studies show that smokers are more likely to get certain OIs than non-smokers. Smoking has been shown to increase your risk for developing:

- Pneumocystis pneumonia (PCP)
- Tuberculosis (TB)
- Cryptococcal meningitis
- Thrush (an oral fungal infection)
- Cervical cancer
- Anal cancer

**Smoking and Women**

There are additional concerns that women who smoke may face. First of all, smoking increases the likelihood that a woman will have trouble getting pregnant. It also decreases a man's sperm count and leads to abnormally-shaped sperm. If a woman smokes during pregnancy, she increases the chances of miscarriage, prematurity (born too early), having a low birth weight baby, and stillbirth (born dead). Researchers believe that smoking may also increase a woman's chances of giving HIV to her baby during delivery.

Children born to women who smoked during pregnancy or who are exposed to smoke in the home (second-hand smoke) are more likely to develop sudden infant death syndrome (SIDS). Children who are around parents who smoke are more likely to suffer from asthma, colds, and ear infections.

Also, smoking is a major risk factor for osteoporosis (bone disease). This is in addition to the risk of bone disease already associated with living with HIV and being a woman.

Finally, smoking can put a damper on your love life by causing impotence (inability to maintain an erection) in men who smoke or breathe second-hand smoke.
The Good News: How Quitting Smoking and Tobacco Products Can Help Your Health

No matter how long you have been smoking, quitting can greatly improve your health. Within 24 hours, your blood pressure and heart rate drop, and your risk of heart attack and stroke begin to go down. Within several months, you can have better circulation and lung function. Over several years, you can greatly reduce your risk of lung cancer and heart disease. In a large, important study, people who quit smoking between age 35 and 44 lived about nine years longer than those who continued to smoke. People who quit by age 50 are half as likely to die of smoking-related causes in the next 15 years than those who continue to smoke.

Quitting smoking or going tobacco-free has other benefits as well:

- Improved sense of smell and taste
- Healthier-looking skin
- Whiter teeth, healthier gums, and fresher breath
- Increased ability to participate in physical activities [17] (exercise, playing with your children, home projects)
- Economic savings: no more money spent on tobacco products; money saved on health insurance premiums
- No more restrictions: as more places ban smoking (restaurants, airports, malls, parks), smoke-friendly spaces are harder to find

Help with Quitting

There are several things that are helpful to understand if you are thinking about quitting smoking or smokeless tobacco. The first has to do with why it is so hard to quit and to stick with it once you have quit. Nicotine is a naturally occurring substance in the tobacco plant. It is addictive, just like heroin and cocaine. After smoking regularly for some time, people become physically and emotionally dependent on nicotine. In order for quitting to work, both the physical and emotional dependency must be addressed.

The physical dependence causes uncomfortable withdrawal symptoms such as anxiety, irritability, impatience, restlessness, trouble concentrating, dizziness, trouble sleeping, depression [18], headaches, and increased appetite. These symptoms usually are at their worst two to three days after quitting and gradually get better over several weeks. It may be easier to remain tobacco free if you know in advance how you may feel and how long you may feel that way. There are ways to ease these symptoms; they are listed below.

Overcoming the emotional dependence on tobacco use can be just as difficult for some people trying to quit. For many, smoking becomes a part of their daily routine, whether it is a means of relaxing or handling anxiety, boredom, or stress. Often, smoking or using smokeless tobacco is associated with triggers – particular emotions (e.g., anxiety) or activities (e.g., having a cup of coffee, socializing with friends) that give you the urge to smoke. Knowing your triggers and how to avoid them can be a key part of successful quitting.

Experts understand that quitting smoking and smokeless tobacco products is not just a matter of willpower. It is important to discuss your plan to quit with your health care provider. In addition, it is important that they be encouraging, identify local resources, and suggest appropriate medical therapies to help you quit. There are several tools available to help you quit, and often a combination of the therapies below is needed:

- **Nicotine replacement therapy**: this is used to help ease withdrawal symptoms while breaking the smoking habit. Afterwards, the dose is gradually reduced and eventually stopped. Nicotine replacement therapy is available in several forms:
  - Transdermal patches (Habitrol, Nicoderm, Nicotrol): patches are worn on the arm or
torso, and nicotine is absorbed through the skin
- Gum (Nicorette, Thrive): nicotine is absorbed through the lining of the mouth; recommended dose depends on the amount of tobacco previously used
- Lozenges (Commit): hard candy that is sucked slowly and absorbed through the lining of the mouth
- Inhaler (Nicorette, Nicotrol): a puff from the inhaler puts nicotine into a vapor that is absorbed in the mouth; some smokers find it helpful that this method is the most like smoking a cigarette; available by prescription only
- Nasal spray: spray of nicotine into nostrils; available by prescription only
- Note: e-cigarettes have not been approved for use as nicotine replacement therapy

- **Anti-smoking medications:**
  - Zyban (buproprion): also an anti-depressant named Wellbutrin (at a different dose), this drug reduces the urge to smoke; available by prescription only
  - Chantix (varenicline): reduces withdrawal symptoms and the pleasure associated with smoking; available by prescription only

- **Acupuncture:** a complementary therapy [19] that involves placing very small needles around the outer ear to reduce cravings and promote relaxation

- **Hypnosis:** or hypnotherapy, involves reaching a state of deep relaxation in which one is open to suggestions for behavioral change (such as quitting smoking)

- **Counseling and support:** many people find it helpful to have professional counseling or the organized support of others when quitting. Many places have organized support groups and smoking cessation classes (in the US, see your local chapter of the American Lung Association or American Cancer Society).

There are also telephone counseling services and hotlines, as well as Internet blogs and support groups. In the US, the National Cancer Institute has a hotline that can give you expert advice from smoking cessation counselors (call toll-free at 1-877-44U-QUIT or 1-877-448-7848). You can also call 1-800-QUITNOW (1-800-784-8669) or go to this map [20] to find smoking cessation counselors in the US and Canada. These counselors may have information about state- or province-specific resources to help you with your plan to quit smoking. People who speak Spanish and want to quit can call 1-855-DEJELO-YA (1-855-335-3569). There is also an Asian Smokers’ Quitline that offers free telephone assistance across the US for Chinese, Korean, and Vietnamese speakers who want to quit smoking. For more information, go to http://www.asiansmokersquitline.org/ [21].

In the UK, you can find the national helpline here [22]. In Canada, a smokers’ helpline is available at 1-877-513-5333 (in English [23] and French [24]). In India, a tobacco quitline is available in English, Hindi, Marathi, Gujarati, and Bengali at 1800 227787.

You deserve to be supported through this difficult change. Talk to your health care provider and choose the method(s) that work best for you.

**Taking Care of Yourself**

Cigarette smoking is a health risk that you control, and quitting smoking is probably the single biggest thing you can do to improve your health. Smoking is a hard habit to break. It gets more difficult the longer and the more you smoke. If you tried to quit before and began smoking again, do not worry. Many people need several tries before they quit for good.

If you feel you are unable to quit, just cutting down on the number of cigarettes you smoke can help your health. Even though giving up smoking may be one of the hardest things you ever do, it can also be one of the best things you do for yourself, your health, your finances, and your family and friends.
Tags:

- cigarettes [25]
- smoking [26]
- heart disease [27]
- cancer [28]
- quitting smoking [29]
- stop smoking [30]
- quit smoking [31]
- nicotine [32]
- tobacco [33]
- e-cigarettes [34]

Additional Resources

Select the links below for additional material related to smoking and tobacco use.

- Smokefree Women [35]
- Ten Things Every HIV-Positive Smoker Should Know (The Center for AIDS Information & Advocacy, via TheBody) [36]
- Health Effects of Cigarette Smoking (CDC) [37]
- Health Benefits of Quitting Smoking Over Time (American Cancer Society; includes infographic) [38]
- Smoking Is Worse Than HIV (Positively Aware) [39]
- What Do We Know About E-Cigarettes? (American Cancer Society) [40]
- The Impact of E-Cigarettes on the Lung (American Lung Association) [41]
- On the Road to Quitting: Guide to Becoming a Non-Smoker (Health Canada) [42]
- Can E-Cigarettes Be a Harm Reduction Approach for HIV-Positive Smokers? (TheBody) [43]
- 10 Self-Help Tips to Stop Smoking (National Health Service, UK) [44]
- E-Cigarettes May Be Just as Addictive as the Real Thing (CBSnews) [45]
- Women and Tobacco Use (American Lung Association) [46]
- Smoking and Tobacco Use (CDC) [47]
- Smoking and HIV (AIDS InfoNet) [48]
- Kicking the Habit: HIV and Smoking (US Department of Veterans Affairs) [49]
- Stay Away from Tobacco (American Cancer Society) [50]
- Reach Out and Offer Her a Helping Hand (SmokeFreeWomen; video) [51]

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[10] https://www.thewellproject.org/hiv-information/cancers
[12] https://www.thewellproject.org/hiv-information/tuberculosis
[16] https://www.thewellproject.org/hiv-information/bone-health
[18] https://www.thewellproject.org/hiv-information/depression-women-and-hiv
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[51] http://www.youtube.com/watch?feature=player_embedded&amp;v=HQHG_QW1xQI