Fact Sheet

This is the 30th tobacco-related Surgeon General’s report issued since 1964. It describes in detail the specific pathways by which tobacco smoke damages the human body. The scientific evidence supports the following conclusions:

**There is no safe level of exposure to tobacco smoke. Any exposure to tobacco smoke—even an occasional cigarette or exposure to secondhand smoke—is harmful.**

- You don’t have to be a heavy smoker or a long-time smoker to get a smoking-related disease or have a heart attack or asthma attack that is triggered by tobacco smoke.
- Low levels of smoke exposure, including exposures to secondhand tobacco smoke, lead to a rapid and sharp increase in dysfunction and inflammation of the lining of the blood vessels, which are implicated in heart attacks and stroke.
- Cigarette smoke contains more than 7,000 chemicals and compounds. Hundreds are toxic and more than 70 cause cancer. Tobacco smoke itself is a known human carcinogen.
- Chemicals in tobacco smoke interfere with the functioning of fallopian tubes, increasing risk for adverse pregnancy outcomes such as ectopic pregnancy, miscarriage, and low birth weight. They also damage the DNA in sperm which might reduce fertility and harm fetal development.

**Damage from tobacco smoke is immediate.**

- The chemicals in tobacco smoke reach your lungs quickly every time you inhale. Your blood then carries the toxicants to every organ in your body.
- The chemicals and toxicants in tobacco smoke damage DNA, which can lead to cancer. Nearly one-third of all cancer deaths every year are directly linked to smoking. Smoking causes about 85% of lung cancers in the U.S.
- Exposure to tobacco smoke quickly damages blood vessels throughout the body and makes blood more likely to clot. This damage can cause heart attacks, strokes, and even sudden death.
- The chemicals in tobacco smoke inflame the delicate lining of the lungs and can cause permanent damage that reduces the ability of the lungs to exchange air efficiently and leads to chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis.

**Smoking longer means more damage.**

- Both the risk and the severity of many diseases caused by smoking are directly related to how long the smoker has smoked and the number of cigarettes smoked per day.
- Chemicals in tobacco smoke cause inflammation and cell damage, and can weaken the immune system. The body makes white blood cells to respond to injuries, infections, and cancers. White blood cell counts stay high while smoking continues, meaning the body is constantly fighting against the damage caused by smoking, which can lead to disease in almost any part of the body.
- Smoking can cause cancer and weaken your body’s ability to fight cancer. With any cancer—even those not related to tobacco use—smoking can decrease the benefits of chemotherapy and other cancer treatments. Exposure to tobacco smoke can help tumors grow.
- The chemicals in tobacco smoke complicate the regulation of blood sugar levels, exacerbating the health issues resulting from diabetes. Smokers with diabetes have a higher risk of heart and kidney disease, amputation, eye disease causing blindness, nerve damage, and poor circulation.
Cigarettes are designed for addiction.
- The design and contents of tobacco products make them more attractive and addictive than ever before. Cigarettes today deliver nicotine more quickly from the lungs to the heart and brain.
- While nicotine is the key chemical compound that causes and sustains the powerful addicting effects of cigarettes, other ingredients and design features make them even more attractive and more addictive.
- The powerful addicting elements of tobacco products affect multiple types of nicotine receptors in the brain.
- Evidence suggests that psychosocial, biologic, and genetic factors may also play a role in nicotine addiction.
- Adolescents’ bodies are more sensitive to nicotine, and adolescents are more easily addicted than adults. This helps explain why about 1,000 teenagers become daily smokers every day.

There is no safe cigarette.
- The evidence indicates that changing cigarette designs over the last five decades, including filtered, low-tar, and “light” variations, have NOT reduced overall disease risk among smokers and may have hindered prevention and cessation efforts.
- The overall health of the public could be harmed if the introduction of novel tobacco products encourages tobacco use among people who would otherwise be unlikely to use a tobacco product or delays cessation among persons who would otherwise quit using tobacco altogether.

The only proven strategy for reducing the risk of tobacco-related disease and death is to never smoke, and if you do smoke to quit.
- Quitting at any age and at any time is beneficial. It’s never too late to quit, but the sooner the better.
- Quitting gives your body a chance to heal the damage caused by smoking.
- When smokers quit, the risk for a heart attack drops sharply after just 1 year; stroke risk can fall to about the same as a nonsmoker’s after 2-5 years; risks for cancer of the mouth, throat, esophagus, and bladder are cut in half after 5 years; and the risk for dying of lung cancer drops by half after 10 years.
- Smokers often make several attempts before they are able to quit, but new strategies for cessation, including nicotine replacement and non-nicotine medications, can make it easier.
- Talk to your doctor or call 1-800-QUIT-NOW and get started on a quit plan today.

For more information, please refer to the Resources. Additional highlight sheets are also available at www.cdc.gov/tobacco