HEALTH BASICS

Risks of tobacco

An overview of how tobacco exposure can affect your health

WHAT IT IS
Health risks from using tobacco or breathing its smoke

WHERE IT COMES UP
Product labels, medical histories, pregnancy, and screening discussions

WHY IT MATTERS
Raises risks of cancer, heart disease, lung disease, and pregnancy harm

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
Primary care clinician, pharmacist, dentist, or tobacco quit service

HOW IT IS CHECKED
No single test; exposure history and condition-specific screening

Overview

"Risks of tobacco" describes the health effects linked with tobacco exposure. It is not a disease or a diagnosis.

Tobacco products include cigarettes, cigars, pipes, waterpipes or hookahs, chewing tobacco, snuff, snus, and heated tobacco. The risks differ by product and pattern of use, but no tobacco product is harmless.

Exposure can also happen without using tobacco yourself. Secondhand smoke is smoke from a burning tobacco product and smoke breathed out by someone using it. Tobacco smoke can remain in indoor air and leave chemicals on surfaces, clothing, and dust.

Cigarette smoking causes the greatest share of tobacco-related disease because it combines repeated exposure with inhaled smoke. Smoking less generally means less exposure, but occasional or social smoking is not risk-free. Cigars, pipes, and waterpipes also produce toxic smoke.

Nicotine is the substance that makes tobacco addictive. It can create strong urges to use tobacco and make stopping difficult. Nicotine is not responsible for all tobacco-related harm: many cancers and lung diseases are caused mainly by other chemicals in tobacco and its smoke.

How it works

Burning tobacco creates a mixture of gases and tiny particles. These reach the lungs, pass into the bloodstream, and travel throughout the body. Some chemicals damage DNA, the instructions inside cells. Repeated DNA damage can contribute to cancer.

Tobacco smoke also injures the lining of blood vessels. It promotes inflammation, makes blood more likely to clot, and reduces the amount of oxygen carried in the blood. These effects contribute to heart attacks, strokes, and disease in arteries outside the heart.

In the lungs, smoke damages the airways and the small air sacs that transfer oxygen into the blood. It also weakens the tiny hair-like structures that normally move mucus and particles out of the lungs. Over time, this can contribute to chronic obstructive pulmonary disease, or COPD. COPD includes long-term airway narrowing and damage to lung tissue.

Smokeless tobacco does not produce smoke, but it exposes the mouth and body to nicotine and cancer-causing chemicals. It can damage gums and teeth and is linked with cancers including mouth, oesophageal, and pancreatic cancer.

Heated tobacco produces an inhaled aerosol rather than ordinary cigarette smoke. Its emissions may contain lower levels of some harmful chemicals than cigarette smoke, but they still contain nicotine and toxic substances. Lower exposure to some chemicals does not mean that a product is safe.

Why it matters for your health

Tobacco affects more than the lungs. Smoking is a major cause of lung cancer, but it is also linked with cancers of the mouth, throat, voice box, oesophagus, stomach, pancreas, kidney, bladder, cervix, colon, rectum, liver, and blood.

It raises the risk of coronary heart disease, heart attack, stroke, and peripheral artery disease. Peripheral artery disease means narrowed arteries, often in the legs, that reduce blood flow.

Smoking is a leading cause of COPD. It can worsen asthma and increase the likelihood of respiratory infections. It can also slow wound healing and contribute to gum disease, tooth loss, eye disease, and type 2 diabetes.

During pregnancy, tobacco smoke can affect the placenta and reduce the oxygen available to the developing baby. Smoking is linked with pregnancy complications, poor fetal growth, premature birth, and sudden infant death syndrome. Nicotine can also affect fetal development, so support during pregnancy should be tailored with a maternity clinician.

Secondhand smoke causes disease in people who do not smoke. In adults, it is linked with

heart disease, stroke, and lung cancer. In babies and children, it increases the risks of sudden infant death syndrome, lower respiratory infections, middle-ear disease, and asthma attacks.

The level of risk is influenced by the product, how often and how long it is used, how deeply smoke is inhaled, and whether more than one product is used. Using another tobacco or nicotine product alongside cigarettes may add exposure rather than replace it.

What can go wrong

Tobacco exposure is related to several named conditions. These include nicotine dependence, cancers, coronary heart disease, stroke, COPD, peripheral artery disease, gum disease, and pregnancy complications. Secondhand smoke can contribute to disease in household members and others nearby.

These conditions do not affect everyone who has used tobacco, and they cannot be diagnosed from exposure history alone. A clinician may use your history, examination, and condition-specific tests to assess concerns.

Arrange routine medical or dental follow-up if you have a persistent cough, increasing breathlessness, repeated chest infections, ongoing hoarseness, a mouth sore that does not heal, or blood in mucus. These changes can have many causes, but they deserve assessment.

Seek emergency help for severe trouble breathing, new chest pressure, collapse, or signs of a stroke such as sudden facial drooping, arm weakness, or difficulty speaking. Coughing up a large amount of blood also requires emergency assessment.

Swallowed tobacco, nicotine liquid, or nicotine products can cause poisoning, especially in children. Contact a poison information service promptly after a suspected exposure. Call emergency services if the person has trouble breathing, a seizure, severe confusion, or becomes unconscious.

What you can do

There is no single blood test, scan, or examination that measures all harm from tobacco. A useful first step is giving a clinician an accurate exposure history.

You can:

Lung cancer screening is not recommended for everyone. Eligibility is based mainly on age and cigarette-smoking history. Screening uses low-dose computed tomography, or low-dose CT, rather than a standard chest X-ray. A clinician can explain whether it applies to you and discuss

possible benefits and harms.

If you want to stop, counselling and approved stop-smoking medicines can help. The suitable option depends on your health, other medicines, pregnancy status, and preferences. Do not change prescribed medicines without discussing them with the clinician who manages them.

Moving to another room, opening a window, or using a fan does not remove secondhand smoke exposure. A smoke-free indoor space provides better protection. Washing hands and changing outer clothing after smoking can reduce residue carried near infants, although it does not make indoor smoking safe.

Stopping tobacco use has health benefits even after many years of use. Risk does not return to zero immediately, and previous exposure should still be included in future medical and screening discussions.

- Record the products you use, how often, and for how many years
- Include past use, secondhand smoke, heated tobacco, and smokeless tobacco
- Ask whether you qualify for lung cancer screening with low-dose CT
- Ask a clinician, pharmacist, or quit service about stopping support
- Arrange dental care if you use smokeless tobacco or notice mouth changes
- Keep your home and car free from tobacco smoke

Common questions

Is occasional smoking safe?

No level of cigarette smoking is considered risk-free. Less smoking usually means less exposure, but even occasional smoke can affect blood vessels and expose cells to cancer-causing chemicals.

Are nicotine and tobacco the same thing?

No. Nicotine is an addictive chemical found in tobacco and used in some other products. Tobacco smoke contains many additional harmful chemicals. Nicotine replacement medicines provide nicotine without burning tobacco and are designed to support quitting.

Are cigars or waterpipes safer than cigarettes?

They are not harmless alternatives. Their smoke contains nicotine, carbon monoxide, and cancer-causing chemicals. Not inhaling deeply may reduce some lung exposure, but the mouth and throat remain exposed.

Can a scan show whether tobacco has harmed me?

No test can give a complete "damage score." Tests are chosen for a specific reason, such as checking breathing symptoms, investigating a mouth change, or screening eligible people for lung cancer. Testing without a clear purpose can lead to false alarms or unnecessary procedures.

Does secondhand smoke outdoors matter?

Smoke is less likely to build up outdoors, but exposure can still be substantial close to someone who is smoking. Distance from the smoke is the practical way to reduce exposure.

Is it too late to stop after many years?

No. Stopping can improve health at any age. A quit service or healthcare professional can help you choose support without assuming that one approach suits everyone.

Sources

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