European Code Against Cancer, 5th Edition

14 ways you can help prevent cancer

Fact Sheet

Recommendation 1 for Individuals on Smoking

Do not smoke. Do not use any form of tobacco, or vaping products. If you smoke, you should quit.

Key summary

- Tobacco use remains the leading preventable cause of cancer in the European Union (EU) and globally. Smoking causes at least 16 forms of cancer.
- Not starting to use tobacco is the best way to prevent tobacco-related cancers, but quitting is possible and reduces the risk of cancer at any age.
- If it is available, using professional help to quit (e.g. behavioural support, such as counselling, and being prescribed medication that helps people to stop smoking) greatly increases success rates.
- Electronic cigarettes (vaping devices) contain nicotine, and their longer-term health effects are unknown. People who have never smoked should not vape, as starting vaping can lead to smoking.

Tobacco and cancer

In 2023, 24% of the EU population aged 15 years and older were current smokers. The highest rates of smoking were reported in people aged 25–54 years, and men were more likely than women to smoke. Rates of smoking vary between different countries from 8% in Sweden to 36% in Greece. In 2022, almost 253 000 people in the EU died from trachea, bronchus and lung cancer. Cigarette smoking is estimated to cause 82% of the lung cancer cases in Europe.

Although rates have declined in recent decades, smoking remains the leading preventable cause of death in the EU and globally. It is also a leading cause of health inequalities.

Tobacco smoke contains more than 5000 chemicals, and some of these are carcinogenic. The most common form of tobacco use in the EU is cigarette smoking, which causes at least 16 different cancer types: lung, larynx, bladder, pharynx, oesophagus, liver, cervix, nasopharynx, pancreas, stomach, oral cavity, kidney, bowel, breast, and ovary, and leukaemia. Other forms of smoked tobacco used in the EU are cigars, pipes, bidis, and shisha, which also cause cancers, including lung, mouth and upper throat, oesophageal, laryngeal, and stomach cancers.

There are also forms of tobacco that are not smoked but are consumed by chewing, sucking, or being breathed in through the nose. These forms are known as smokeless tobacco. There is good evidence that many forms of smokeless tobacco cause cancer, particularly head and neck cancers.

Actions to reduce your cancer risk

Do not start smoking, as preventing tobacco use can reduce lifetime cancer risk. However, there is good evidence that quitting is beneficial at any age. When people who continue to smoke are compared with those who quit at different ages, the risk of cancer is reduced when smoking is stopped, and the reduction in risk is greatest in people who stop smoking at younger ages compared with those who stop later in life.

If you do use tobacco, the best thing you can do to reduce your risk of cancer is to quit. The chances of successfully quitting are greatly increased by getting help from a health-care professional. The most effective methods involve a combination of behavioural support and pharmacotherapy. Behavioural support (e.g. counselling) can be carried out face to face, by telephone, online, or via mobile devices. Pharmacotherapy includes nicotine replacement therapy (e.g. patches, gum, lozenges) and medication (e.g. bupropion, varenicline, cytisine).

Stopping tobacco use before an operation or treatment for cancer improves recovery. There is some evidence that quitting tobacco use may improve survival even after a cancer diagnosis.

Co-benefits for the prevention of noncommunicable diseases (NCDs) with similar risk factors and opportunities for health promotion

Smoking is also a risk factor for the three other main NCDs: cardiovascular diseases, diabetes, and respiratory diseases. Therefore, preventing smoking will also reduce the risk of these diseases. Quitting smoking has benefits for cardiovascular and respiratory health, and people with diabetes who stop smoking are better able to manage their blood sugar levels.

International Agency for Research on Cancer

World Health Organization

Check out the **Exposure to other people's tobacco smoke Fact Sheet** to learn more.

Tobacco- and nicotine-containing products

In addition to tobacco products that are smoked and smokeless tobacco, a range of other tobacco- and nicotine-containing products are available in the EU. These include heated tobacco products (HTPs), electronic cigarettes (vaping devices), and nicotine pouches. More research is needed about the links between these products and cancer risk, because they are quite new compared with traditional cigarettes. Almost all of these newer products contain nicotine, which is an addictive substance. In some parts of the EU, electronic cigarettes or vaping devices are used as a cessation aid by people who smoke and are trying to quit. Electronic cigarettes or vaping devices should not be used by young people or by people who have never smoked. Some studies suggest that starting vaping can lead to smoking, with its associated risks of cancer.

Specific target groups

Addressing tobacco use can contribute to reducing health inequalities. In the EU, tobacco use is more common in disadvantaged communities, who are already at risk of having worse health outcomes.

This is a reflection of the interactions between people's living environments, the available resources, social norms (including cultural and religious practices), and other factors. These complex factors influence both the uptake of tobacco use in these populations and the rates at which people quit.

Learn about policies that help support reducing or stopping tobacco use

A range of policies support reducing or stopping tobacco use. These policies are set out in the WHO Framework Convention on Tobacco Control, which has been endorsed by the EU and its Member States.

- Raising the price of tobacco through taxation can reduce tobacco use.
- Addressing all forms of tobacco marketing, advertising, and promotion, including introducing standardized packaging for tobacco products, is particularly important for prevention.
- Adding large-pictorial health warning about the dangers of tobacco is especially effective in convincing people who smoke to quit.
- Providing services to help people stop using tobacco, such as behavioural support and pharmacotherapy, can increase the opportunities (and success rates) for those trying to quit.

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