

14 ways you can help prevent cancer



Recommendation 2 for Individuals on Exposure to other people's tobacco smoke

Keep your home and car free of tobacco smoke.

Key summary

- Exposure to tobacco smoke exhaled by others, or from the burning end of a cigarette, is known to cause cancer. Smoke can be invisible, can remain in the air for hours, and can build up on surfaces.
- Exposure to second-hand smoke can cause lung cancer in people who have never smoked and may also increase the risk of other types of cancer. It also poses other health risks to pregnant women, babies, and children.
- Exposure to second-hand smoke can be a barrier for people who are trying to quit smoking.
- Keeping your home and car free of smoke will help protect you and others from exposure to second-hand smoke.

Second-hand smoke and cancer

In 2023, 23% of European Union (EU) residents aged 15 years and older were exposed to tobacco smoke indoors, and half of them were exposed daily. Daily exposure to tobacco smoke indoors was more common in men than in women. In 2021, exposure to second-hand smoke resulted in 53 000 deaths in the EU; almost 9000 of these were due to cancer. Exposure to second-hand smoke in children aged 13–15 years decreased from 2002 to 2017 but remains high in some EU Member States.

Exposure to the tobacco smoke exhaled by others (known as second-hand smoke) and smoke from the burning end of cigarettes, cigars, pipes, and other smoked tobacco products, including shisha (known as side stream smoke) is known to cause cancer. Tobacco smoke contains more than 5000 chemicals, and some of these are carcinogenic.

Exposure to second-hand smoke (especially over long periods of time) can cause lung cancer in people who have never smoked. There is some evidence that exposure to second-hand smoke is linked to breast, cervical, and head and neck cancers. Recent research has suggested that exposure to second-hand smoke at home can be a strong barrier to stopping smoking in patients with cancer types that are not traditionally perceived to be related to tobacco. Other serious health risks are associated with exposure to second-hand smoke, particularly for pregnant women, babies, and children. These risks include having a baby with low birth weight after exposure to second-hand smoke during pregnancy. Babies and children exposed to second-hand smoke are at higher risk of respiratory and ear conditions and cot death.

Actions to reduce your cancer risk

Quitting smoking is the best way to remove the risk of exposure to second-hand smoke for other people. Quitting smoking at any age reduces your cancer risk, and your chances of success are increased if you can access professional help, including behavioural support and pharmacotherapy (medications that help you stop smoking).

Ensure that smoking is not permitted in your home and car, and avoid indoor spaces where others are smoking. These actions reduce the risk of exposure to second-hand smoke for you and others. Tobacco smoke can spread easily in the home and move from room to room. It can stay in the air for hours, and ventilation (opening windows) in the home or car does not completely remove the risk of exposure. If you or others in your household smoke, ensure that you always smoke outside and ask others to do the same. Take action to keep your car free of smoke by never smoking while driving and asking others in the vehicle not to smoke.

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

Exposure to second-hand smoke can cause cardiovascular diseases, including heart disease and stroke, in people who have never smoked. It is also a risk factor for respiratory conditions, including chronic obstructive pulmonary disease. Therefore, reducing or avoiding exposure to second-hand smoke will also reduce the risk of these diseases.

Specific target groups

Smoking is the leading preventable cause of inequalities in health. In many parts of EU, people who have never smoked and live with people who smoke are more likely to be from less affluent households. Exposure to second-hand smoke, like active smoking, contributes to these inequalities in health.



Learn about policies that help support reducing or stopping exposure to second-hand smoke

A range of policies support reducing or stopping tobacco use. These policies will also assist with reducing exposure to second-hand smoke. The World Health Organization Framework Convention on Tobacco Control, which has been endorsed by the EU and its Member States, sets out these policies.

- Introducing comprehensive smoke-free laws to protect people from second-hand smoke on public transportation and in workplaces, indoor public places, and other public places. Creating completely smoke-free settings helps people who smoke quit and prevents youth smoking initiation.
- Some EU Member States have also introduced policies to address smoking in private vehicles when children and pregnant women are present. These policies are usually enforced by the police and involve a fine if an adult is caught smoking in a private vehicle with children as passengers.

References

Carreras et al. (2020). *Int J Cancer*, 147(9): 2387-2393. PMID: 32356370

Carreras et al (2019). *Prev Med*, 129:105833. PMID: 31505203

Council of the European Union (2024). Council Recommendation on Smoke- and Aerosol-Free Environments

European Commission (2024). Attitudes of Europeans towards tobacco and related products. Available from: <https://europa.eu/eurobarometer/surveys/detail/2995>

Global Burden of Disease Collaborative Network (2021). Global Burden of Disease Study 2021 Results

International Agency for Research on Cancer (2012). Personal Habits and Indoor Combustions. IARC Monographs, Volume 100E

Idris et al. (2019). *J Otolaryngol Head Neck Surgery*, 48(1): 1-6. PMID: 31337433

Lawson et al. (2015). *Cancer*, 121(15): 2655-2663. PMID: 25877384

Malevolti et al. (2023). *J Cancer Res Clin Oncol*, 149(15):14353-14363. PMID: 37516982

Öberg et al. (2011). *The Lancet*, 377(9760): 139-146. PMID: 21112082

Royal College of Physicians (2010). Passive smoking and children. A report by the Tobacco Advisory Group

World Health Organization. WHO Framework Convention on Tobacco Control. Available from: <https://fctc.who.int/>

World Health Organization. Regional Office for Europe. (2019). European tobacco use: trends report 2019. World Health Organization. Regional Office for Europe. <https://iris.who.int/handle/10665/346817>