OPEN LETTER

Youth Nicotine Addiction: From Prevention to Protection
No More Delays, Time to Act Together!

Tobacco use is unlike other threats to global health. Infectious diseases do not employ multinational public relations firms. There are no front groups to promote the spread of cholera. Mosquitoes have no lobbyists[1].

To Her Excellency,
Ursula von der Leyen
President of the European Commission
Copy to The College of Commissioners

Dear President von der Leyen,

More than four centuries ago, tobacco was described as “loathsome to the eye, hateful to the nose, harmful to the brain and dangerous to the lungs.” Today, scientific evidence is unequivocal: **tobacco consumption remains the leading cause of preventable death worldwide**. **Around 27% of all cancers are attributable to tobacco use, and more than seven million people die every year from tobacco-related diseases.**

At the heart of tobacco consumption lies a powerful and often underestimated driver: nicotine addiction. It is this addictive mechanism that sustains use over time and makes cessation difficult. **For children and young people, nicotine represents the primary entry point into long-term dependency.** Often introduced through products that appear attractive, modern, or less harmful, many young users are drawn in without fully understanding the risks, only to find themselves quickly dependent. Addressing nicotine addiction at its source is therefore essential to preventing a new generation from being drawn into lifelong use.

The European Union has set an ambitious and commendable objective: to create a tobacco-free generation by 2040, as outlined in Europe’s Beating Cancer Plan. Achieving this goal requires a clear and sustained focus on protecting young people from developing nicotine dependence, which remains the primary pathway into long-term tobacco and nicotine use.

Across the Union, new nicotine products are rapidly expanding in visibility and accessibility, often deliberately designed and marketed to appeal to younger audiences through flavours, sleek packaging, and targeted digital promotion. This trend poses a serious and growing public health threat.

[1] https://pmc.ncbi.nlm.nih.gov/articles/PMC8519313/

Preventing early exposure to nicotine must be treated as an urgent priority, as addiction developed during adolescence significantly increases the likelihood of lifelong dependence and long-term harm. Crucially, youth nicotine addiction is not an isolated issue. It frequently acts as a gateway to broader patterns of substance use, with strong evidence linking early nicotine exposure to an increased risk of subsequent use of alcohol and illicit drugs.

At the same time, the health consequences of tobacco and nicotine use are profound, systemic, and too often underestimated. Tobacco use is a leading cause of cardiovascular disease, including myocardial infarction, arteriosclerosis, cerebrovascular accidents, and peripheral vascular disease, which can result in limb amputations. It is also responsible for a wide range of cancers, extending far beyond lung cancer to include cancers of the bladder, kidney, colorectum, and the pharyngeal, laryngeal, and oral regions. **Framing tobacco-related harm primarily as a respiratory issue fails to capture its full impact on the human body.** These realities underscore the urgent need for comprehensive, forward-looking policies that effectively reduce affordability, limit exposure, and protect young people from nicotine addiction in all its forms.

Tobacco and nicotine control is not solely a public health issue; it is a complex, cross-sectoral challenge that affects fiscal policy, trade, environment, agriculture, and digital regulation. The World Health Organization Framework Convention on Tobacco Control (WHO FCTC), ratified by the European Union, provides a comprehensive international framework demonstrating how to address this complexity through coordinated, multisectoral action.

A healthy and resilient European Union depends on the well-being of its younger generations. A child addicted to nicotine at 13 is far more likely to become a chronically ill adult by 40.

Reducing nicotine uptake among youth contributes directly to stronger future workforce participation, improved productivity, and more sustainable healthcare systems. **Protecting young people today is therefore closely linked to Europe's long-term competitiveness and social cohesion.**

In this context, a forward-looking regulatory approach is essential. **The current Tobacco Products Directive provides an important foundation**, yet the evolving landscape of nicotine products, including synthetic nicotine and nicotine analogues, calls for a more comprehensive framework. **Revising this directive with the aim of developing a Tobacco and Nicotine Products Directive would allow for a coherent and consistent regulation of all nicotine-containing products.** Such an approach would strengthen the protection of young people by **ensuring that all products with addictive potential are addressed** under a unified public health strategy, reducing regulatory gaps and supporting more effective prevention of youth nicotine initiation.

As it has done over the past 30 years, **the European Network for Smoking and Tobacco Prevention (ENSP) stands ready to support the European Commission in advancing tobacco and nicotine control across the Union.** Established in 1996–1997 at the request of the European Commission to provide expertise in this field, ENSP is not a lobbying organisation.

Protecting the health of European citizens is not a lobbying activity, but a public interest responsibility.

ENSP operates as an independent technical partner[2], drawing on its extensive European network, longstanding collaboration with EU institutions and the World Health Organization, and recognised expertise in policy, research, and implementation. **In this capacity, ENSP can contribute to enhanced coordination** among stakeholders, the provision of **evidence-based input,** support for the **implementation of EU legislation** and WHO FCTC provisions, **capacity-building** across Member States, and strengthened **prevention efforts**, particularly among youth.

As President of the European Commission and medical doctor, you continue to shape policies that influence the well-being of millions of Europeans. Strengthening efforts to prevent nicotine addiction among young people represents a powerful opportunity to advance both public health and the future prosperity of the Union.

Reaching the objective of reducing tobacco use to below 5% by 2040, as specified also in the ENSP Statutes from 2011, will depend on sustained commitment, coordinated action, and a strong emphasis on prevention. **By prioritizing youth protection and addressing nicotine dependence at its source, the European Union can make meaningful progress** toward a healthier, more resilient future.

The years ahead offer an important opportunity to strengthen this vision and ensure that the next generation grows up less exposed to addiction and better protected in their health and well-being.

Through joint efforts and cooperation, we aim to ensure that the voice of the European people is heard and reflected in our collective action.

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[2] https://www.ombudsman.europa.eu/en/doc/inspection-report/en/192546

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APEPOC - Asociación de Pacientes con EPOC
SOCIDROGALCOHOL
FAECAP - Federación de Enfermería Comunitaria y de Atención Primaria
Societat Catalana d'Atenció i Tractament del Consum del Tabac (SCATT)

SWEDEN

A Non Smoking Generation
Heart Lung Foundation
Tobaksfacta
Doctors against Tobacco
Psychologists, Social Workers and Health Promoters against Tobacco
Dentistry against Tobacco
Nurses Association for a Tobacco Free Society
Teachers against Tobacco

SWITZERLAND

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OxySuisse

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The Health Institute Association (Sagliga Evet Dernegi)
YESILAY - Turkish Green Crescent Society
Kansersiz Yaşam Derneği (KAYD)

UKRAINE

Advocacy Center Life

UNITED STATES

Action on Smoking & Health -ASH
Campaign for Tobacco-Free Kids

ABOUT ENSP

The European Network for Smoking and Tobacco Prevention (ENSP) is an international organisation based in Brussels, active for 29 years in the field of tobacco control.

The organization was established between 1995 and 1997 at the request of the European Commission as part of the Europe against Cancer (EaC) Programme (1994 Vinci Resolution). Its creation aimed to bring together, under a unified European framework, key stakeholders engaged in tobacco control and cancer prevention. By consolidating expertise, advocacy, and policy engagement at the European level, the organization sought to strengthen coordination, amplify the impact of public health initiatives, and support the development of coherent, evidence-based strategies to reduce the burden of noncommunicable diseases across Europe[3].

With more than 80 members, including national coalitions, present in 38 European Countries (23 EU and 15 non-EU), ENSP objectives are to fully implement the WHO Framework Convention on Tobacco Control (FCTC) and to reduce the prevalence of tobacco use in the European region to less than 5% by 2040.

[3] https://ensp.network/ensp-25-years-monograph/

ANNEX
Evidence Summary: Preventing Nicotine Addiction Among Young People in Europe

The evidence demonstrates that nicotine is a highly addictive psychoactive substance with specific and heightened risks for adolescents and that current market developments are increasing exposure and dependence among young people in Europe.

Nicotine exerts its addictive effects primarily through activation of nicotinic acetylcholine receptors (nAChRs), leading to stimulation of the mesolimbic dopamine system and reinforcement of repeated use (Jiang et al., 2025). Chronic exposure produces neuroadaptations, including receptor desensitisation and upregulation, which sustain dependence (Liu et al., 2025). Importantly, adolescent exposure is associated with long-term alterations in brain development, including changes in reward processing and impulse control, increasing vulnerability to addiction and other substance use later in life (Reynolds et al., 2025; McGrath-Morrow et al., 2020). These findings confirm that nicotine addiction is not only a behavioural phenomenon but a neurobiological process with heightened impact during youth.

Recent product innovation has significantly increased the addiction potential of nicotine, particularly among young users. The introduction of nicotine salt formulations allows higher concentrations of nicotine to be delivered with reduced sensory irritation, facilitating rapid absorption and higher peak plasma levels (Benowitz, 2010; Jackler & Ramamurthi, 2019). Flavourings and product design features further enhance appeal and reduce aversion, especially among adolescents (Leventhal et al., 2021; Gades et al., 2022). Survey research found that use of sweet-flavoured Electronic Nicotine Delivery Sistems (ENDS) increased over time with tobacco flavour decreasing in popularity, suggesting that flavoured products have greater abuse potential (Gades et al., 2022). These developments result in pharmacokinetic profiles that increasingly resemble or exceed those of combustible cigarettes, thereby amplifying dependence risk.

Epidemiological evidence indicates a fundamental shift in nicotine use patterns, with non-combustible products now serving as the primary entry point for youth. Adolescents are significantly more likely than adults to use e-cigarettes, with prevalence estimates indicating that youth are on average nine times more likely to vape (World Health Organization, 2024). In the WHO European Region, approximately 11.6% of adolescents aged 13–15 years use tobacco products and this figure likely underestimates total nicotine exposure due to increasing use of e-cigarettes and nicotine pouches (World Health Organization, 2024).

In several settings, e-cigarette use among adolescents exceeds that of conventional cigarette smoking, indicating a shift rather than a reduction in nicotine consumption.

Evidence of dependence among youth users is substantial. Surveys show high levels of loss of autonomy across nicotine products, including among exclusive e-cigarette users (Lin et al., 2022). Increasing reports of craving and early-morning use suggest strengthening dependence over time, particularly following the introduction of high-dose nicotine salt products (Jackson et al., 2025). European data further indicate that a significant proportion of adolescents self-identify as addicted, with a majority of quit attempts unsuccessful (Raad et al., 2025). These findings demonstrate that modern nicotine products are not mitigating addiction but are actively facilitating its development.

Patterns of dual and poly-use are increasingly common among young people, involving combinations of e-cigarettes, cigarettes and oral nicotine products. Such patterns are associated with sustained nicotine exposure and reduced likelihood of cessation, thereby increasing cumulative health risks (Hamoud et al., 2024; Zamarripa et al., 2025). This reinforces the conclusion that new nicotine products often complement rather than replace existing forms of use.

Nicotine exposure during adolescence is associated with direct and long-term health consequences. It disrupts neurodevelopmental processes and is linked to cognitive impairment and increased susceptibility to neuropsychiatric disorders (McGrath-Morrow et al., 2020; Reynolds et al., 2025). Nicotine also contributes to cardiovascular dysfunction through mechanisms including oxidative stress, endothelial damage and sympathetic activation (Münzel et al., 2025). These biological effects indicate that nicotine is not a benign substance and that early exposure may initiate long-term disease pathways.

From a population health perspective, early initiation of nicotine use is strongly associated with greater dependence severity, longer duration of use and higher cumulative lifetime exposure (Munzel et al., 2021). This trajectory is likely to translate into a substantial future burden of cardiovascular, metabolic and neuropsychiatric disease across Europe. The increasing prevalence of youth nicotine use, combined with more efficient delivery technologies and highly appealing product designs, suggests that without strengthened preventive measures, a new generation may face prolonged exposure and associated health risks.

In conclusion, the evidence clearly indicates that nicotine addiction among young people is being driven by a combination of biological vulnerability, product engineering and changing patterns of use. Strengthening efforts to prevent youth nicotine initiation and dependence therefore represents a critical opportunity to protect public health and reduce long-term economic burden within the European Union.

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