Submission to the International Narcotics Control Board

Trafficking in New Psychoactive Substances: Implications for the Prevention and Treatment of Drug Use Disorders

1. Why New Psychoactive Substances Exist?

New psychoactive substances (NPS) rapid proliferation and diversification in recent decades reflect a response from the dynamics of the illicit drug market to drug scheduling. Prohibition, through repeated drug scheduling, has failed to eliminate drug demand or supply. Suppliers adapt by designing molecularly altered compounds that produce similar desired effects while avoiding legal frameworks.

Growing NPS seizures worldwide indicate this market adaptation to current legislation. Each scheduling action promotes the diversification of NPS rather than reducing its use while promoting conditions that make NPS -and other substances- more dangerous: lack of information, lack of health services, lack of predictability, and lack of legal access to safer alternatives.

This phenomenon creates a knowledge gap and has health implications that remain largely unknown, due to limited data on neurological effects, long-term toxicity, and interactions with other substances (Gutiérrez et al., 2025; Simão et al., 2022). In addition, many people who use drugs are not aware that the substances that they use might be adulterated or substituted with NPS (UNODC, 2025).

2. Health and Social Impacts

The risks and harms associated with NPS cannot be understood solely as a result of the pharmacological properties of the substances themselves (Gutiérrez et al., 2025; Simão et al., 2022), but also through the structural conditions created by their illegality. In an unregulated market, the absence of quality control and the inability to verify composition constantly disrupt the collective knowledge developed by communities of people who use drugs to navigate risk, share safer use practices, and make informed decisions (Manchester Metropolitan University, 2023).

The global prevalence of synthetic NPS use cannot be estimated. However, among the 26 countries with available data, the median past-year prevalence of any NPS use stands at 0.3%, well below the prevalence of many controlled substances. While patterns of use vary across studies, in general, these show that the prevalence is lower among women than men, and higher among high-school students (aged 15–16) than among the adult population (UNODC, 2025).

As it was mentioned before, a main issue related to NPS is that people may consume these without knowing it due to the adulteration of substances or their mislabeling. Information on the use and trafficking of new drug mixtures and concoctions remains scarce, due to the difficulties of self-reporting use of unknown blends and the limited availability of laboratory analysis for certain combinations. The harms associated with these mixtures are especially

linked to factors such as unknown or variable content, the presence of harmful ingredients, and potential drug interactions (UNODC, 2025).

In different contexts across regions, marginalized and socially disadvantaged populations (ex., people experiencing homelessness, lacking access to basic rights and support systems, including health care services, people with long-term complex drug use histories) are among the main users of NPS, such as synthetic cannabinoids and synthetic opioids (UNODC, 2025). Their use of these substances is increasing precisely because of cost and availability. These groups face the most severe health consequences and the greatest barriers to accessing care.

Young people are more vulnerable to the risks and harms of NPS than the general population due to their particular stage of physical and mental development. Young people are disproportionately represented among NPS users globally, and consistently show higher rates of use than older age groups across all regions with available data. UNODC World Drug Report data documents this pattern across methodologies and regions: past-year NPS use among 15–16 year-olds in Lithuania was 20 times higher than in the 15–64 population (4% vs 0.2%); in Poland, 10 times higher (8% vs 0.8%); in the United Kingdom, in the 16-24 age group, 2/3 times the rate of the 16–59 population in five consecutive years (UNODC, 2025). In Europe, EUDA reports past-year NPS prevalence among 15-34 year-olds to be nearly double that of the 15–64 age group (1.1% vs 0.6%). A 2026 systematic review of 190 studies covering over 238 million participants globally confirmed that higher NPS use is consistently observed among young people (Rajguru et al., 2026)

The 2024 European School Survey Pproject on Alcohol and Other Drugs found that approximately 3% of the 15-16 year old students in Europe reported lifetime NPS use, which is a higher proportion than those reporting use of amphetamines (1.8%), MDMA (2.1%), cocaine (2.3%), or LSD/hallucinogens (1.8%) individually, making NPS the most used illicit substance after cannabis in this age group (EUDA, 2025b).

Young people are consuming NPS not only voluntarily, but also without their knowledge due to adulteration and mislabeling. Research with young adults at nightclubs and festivals found that one third of self-reported MDMA users tested positive for NPS in hair samples, 27.8% for synthetic cathinones (Palamar et al., 2017). In a different study, 12-47% of those reporting "ecstasy" use tested positive for NPS in biological samples (Palamar & Salomone, 2022). European drug checking data corroborate this, as in 12% of cathinone samples submitted, the user expected a different result.

The lack of youth-tailored responses compounds this exposure. According to the 2024 European Web Survey on Drugs, 47% of NPS users reported nasal use as their primary route of administration, with injection reported by only 2%. Yet existing services remain primarily designed around injecting drug use and are designed around the "traditional" profile of an older and male opioid injecting user, leaving the vast majority of NPS users without adequate responses (EUDA, 2025a). The C-EHRN 2024 Monitoring Report identified young people under 18 as one of the most underserved populations, facing a mix of legal, social, and practical barriers in reaching services (Moura et al., 2024).

3. Public Health Responses

Framing the issue as "trafficking in NPS" and its health implications misleads the real cause of harm, which is the conditions created by the prohibition framework. Centering solely on supply and trafficking masks the structural drivers, which are a response to market dynamics and disruptions caused by prohibition, and limits the most effective interventions available.

In this sense, prevention must be understood as a spectrum. The risk-based classification framework adopted by both UNODC and EMCDDA recognizes three levels, universal, selective, and indicated, because different populations have different needs for health care interventions (EUDA, n.d.; UNODC, 2023). Rather than aiming exclusively to abstinence-only goals, effective prevention strategies should also aim to delay the age of first drug use, improve access to health and social services, and integrate harm reduction as a core component of the prevention continuum.

Treatment and prevention systems were largely designed around a particular profile of drug user: typically an opioid or alcohol user, injecting, older adult, and male. These approaches fail to respond to the realities of NPS use, which lies across different demographics, motivations, and drug use patterns. Recommending "prevention and treatment" is not enough when appropriate and tailored treatment for NPS users does not exist, when health professionals lack accurate information to provide evidence-based care, and when prohibition itself pushes people toward these substances and toward what is categorized as "substance use disorder."

Moreover, approaching people who do not identify as having a drug use disorder with treatment-oriented language generates distrust and disengagement, particularly among young people, who remain among the most impacted populations. A person-centered response cannot begin by imposing a clinical identity that the person does not recognize.

Drug education in recreational, educational, and healthcare settings is a key tool. Traditional abstinence-based prevention models are also failing in the context of NPS, where the specific substances, their effects, and their harms and risks are constantly changing (Calzada et al., 2024; Fitzgerald et al., 2026).

Full Spectrum Harm Reduction (FSHR) offers a more comprehensive and realistic framework. While being inclusive of classical harm reduction interventions, needle exchange, naloxone distribution, opioid agonist treatment, and drug checking, FSHR builds on these by integrating social determinants such as housing, food security, mental health support, and legal aid as essential components of a harm reduction response. It centers autonomy, lived experience, peer-led services, and structural changes -such as drug policy reform (Calzada et al., 2024).

Peer-led initiatives are particularly relevant in the NPS context, where a major lack of updated official information exists. People with lived experience are, in many cases, the most knowledgeable and up-to-date source of information about what is being used, how, and with what effects (Fitzgerald et al., 2026). They must be included in research, policy

development, and service design to produce responses that actually work.

Drug checking and harm reduction services have an important role as these provide central information about the composition and potency of substances in use, reduce harm, prevent overdose, and enable more informed decision-making. The criminalization of NPS has also created barriers for those attempting to work in drug checking, as it makes testing cost-prohibitive and, in some cases, restricts the number of organizations authorized to handle these substances (Manchester Metropolitan University, 2023).

4. Recommendations

The INCB's 2023 Annual Report itself acknowledges that drugs sourced from cryptomarkets are empirically less adulterated and of higher purity than those bought offline, that peer information-sharing among people who use drugs reduces adverse consequences and serves as an early warning system for new substances, and that drug checking services play an essential role in promoting the health and well-being of people who use drugs INCB, 2024). Yet, in the same chapter, the Report urges governments to prosecute illegal online marketplaces and makes no specific recommendation on drug checking, peer outreach, or any of the harm reduction approaches it implicitly recognizes as valuable.

- No prevention or treatment strategy will respond fast and adequately enough to a market that rapidly adapts to prohibition. Drug policy reform is at the core of the public health agenda.
- Reject the binary of criminal or patient. The majority of people who use NPS do not identify with either category. Health responses that fail to acknowledge this will not reach the populations they aim to serve.
- Integrate harm reduction as a non-negotiable component of all prevention, treatment, and policy frameworks. This includes drug checking services, peer-led outreach to marginalized communities and services,, and the removal of regulatory barriers that currently prevent harm reduction organizations from accessing and testing NPS. Expanding access to drug checking (in recreational settings, harm reduction programs, and health care services) must be a policy priority.
- People with lived experience must be included in all research, policy, and service design processes. In the rapidly changing NPS context, communities of PWUD often hold more updated knowledge than institutional monitoring systems. This is important and urgent because existing health responses were not designed with NPS users in mind, nor with stimulant users. Tailored and effective health interventions require structural inclusion from those most impacted by current drug policies, including young people who use drugs.
- Invest in research on the health effects of NPS beyond acute poisoning and mortality, including chronic toxicity, polysubstance use interactions, and neurological implications, to meaningfully inform harm reduction efforts and clinical guidelines.
- Decriminalize drug use and redirect resources toward publicly funded harm reduction programs, including drug checking for the most affected communities.
- Expand the prevention continuum beyond abstinence-based interventions toward inclusive approaches that meet people where they are, regardless of their relationship to drug use.

NPS exist, in large part, because of the policy model designed to prevent them. A response that does not address this approach will continue to chase a market that changes rapidly, while failing the people most exposed to its harms.

References:

Calzada, R., Keller, E., Castro, T., & Arredondo, C. (2024). *Connecting theory and practice: Best practices of the Full Spectrum Harm Reduction Survey report*. Youth RISE International. https://youthrise.org/wp-content/uploads/2025/01/Connecting-Theory-and-Practice-Report-on-the-Best-Full-Spectrum-Harm-Reduction-Practices-Survey.pdf

European Union Drugs Agency. (n.d.). *Prevention toolkit*. EUDA. https://www.euda.europa.eu/toolkit/prevention-toolkit_en

European Union Drugs Agency. (2025). Synthetic stimulants – the current situation in Europe. In European Drug Report 2025: Trends and Developments. https://www.euda.europa.eu/publications/european-drug-report/2025/synthetic-stimulants_en

European Union Drugs Agency. (2025b). *Key findings from the 2024 European School Survey Project on Alcohol and Other Drugs (ESPAD)*. https://www.euda.europa.eu/publications/data-factsheets/espad-2024-key-findings_en

Fitzgerald, N. D., Palamar, J. J., & Cottler, L. B. (2026). Self-reported adverse effects associated with new psychoactive substance use in a sample of adults from 20 US cities. *Drug and Alcohol Review*, *45*(2), e70119. https://doi.org/10.1111/dar.70119

International Narcotics Control Board. (2024). *Report of the International Narcotics Control Board for 2023*. United Nations. https://www.incb.org/documents/Publications/AnnualReports/AR2023/Annual_Report/E_INCB_2023_1_eng.pdf

Manchester Metropolitan University. (2023). *Reducing harm posed by new psychoactive substances* [Research impact case study]. https://www.mmu.ac.uk/research/our-impact/case-studies/reducing-harm-psychoactive-substances

Moura, J., Rigoni, R., Schiffer, K., & C-EHRN Focal Points. (2024). *Civil Society Monitoring of Harm Reduction in Europe 2024: Executive summary*. Correlation – European Harm Reduction Network. https://correlation-net.org/wp-content/uploads/2025/07/2024_CEHRN_Monitoring_Executive-Summary.pdf

Palamar, J. J., Salomone, A., Gerace, E., Di Corcia, D., Vincenti, M., & Cleland, C. M. (2017). Hair testing to assess both known and unknown use of drugs amongst ecstasy users in the electronic dance music scene. International Journal of Drug Policy, 48, 91–98. https://doi.org/10.1016/j.drugpo.2017.07.010

Palamar, J. J., & Salomone, A. (2021). Shifts in Unintentional Exposure to Drugs Among People Who Use Ecstasy in the Electronic Dance Music Scene, 2016-2019. The American journal on addictions, 30(1), 49–54. https://doi.org/10.1111/ajad.13086

Rajguru, A. J., Ahluwalia, Y., Singh, S., et al. (2026). Prevalence of novel psychoactive substance (NPS) use across different geographical regions of the world: A systematic review and meta-analysis. *Current Addiction Reports*, *13*, Article 14. https://doi.org/10.1007/s40429-026-00728-0

Rock, K. L., Treble, R., & Copeland, C. S. (2026). Legislating novel psychoactive substances: lessons from 15 years of UK mortality data (2007–2022). *Frontiers in Pharmacology*, *16*, 1708335. https://doi.org/10.3389/fphar.2025.1708335

Rymill, S., Candler, L., Ramachandran, P., Bacev-Giles, C., Ngendabanka, R.-J., Racine, S., He, N., Ross, M., & Mohottalage, S. (2025). New psychoactive substances (NPS) identified in Canada: Results of the online NPS survey (2020–2023). *Emerging Trends in Drugs, Addictions, and Health*, *5*, 100178. https://doi.org/10.1016/j.etdah.2025.100178

Simão, A. Y., Antunes, M., Cabral, E., Oliveira, P., Rosendo, L. M., Brinca, A. T., Alves, E., Marques, H., Rosado, T., Passarinha, L. A., Andraus, M., Barroso, M., & Gallardo, E. (2022). An update on the implications of new psychoactive substances in public health. *International Journal of Environmental Research and Public Health*, *19*(8), 4869. https://doi.org/10.3390/ijerph19084869

Gutiérrez, N., Zúñiga, R., Tabia., E., & Alba, C.. (2025). Nuevas sustancias psicoactivas y sus implicaciones neurológicas. *Acta Neurológica Colombiana*, *41*(2). https://doi.org/10.22379/anc.v41i2.1879

United Nations Office on Drugs and Crime. (2023). *Review of national prevention systems based on the UNODC/WHO International Standards on Drug Use Prevention*. UNODC. https://www.unodc.org/res/drug-prevention-and-treatment/publications/data/2023/october/review-of-national-prevention-systems-based-on-the-unodc-who-international-standards-on-drug-use-prevention_html/reps_norway_report_pre_publication_version.pdf

United Nations Office on Drugs and Crime. (2025). Discussion guide for the 2025 CND thematic discussions on the implementation of all international drug policy commitments, following up to the Ministerial Declaration of 2019. https://www.unodc.org/documents/commissions/CND/CND_thematic_discussions/2025/2025_CND_TD_DiscussionGuide_shared.pdf